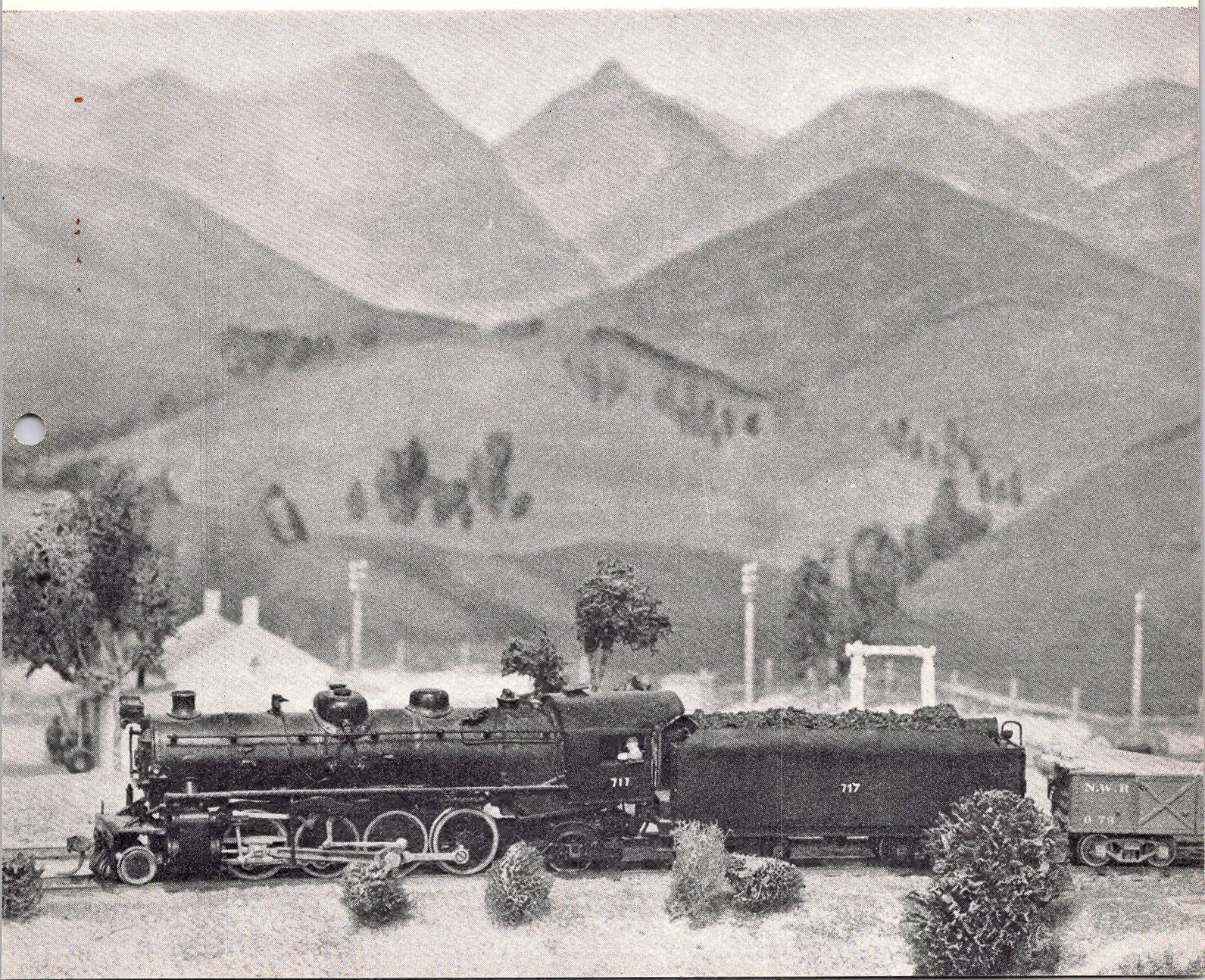
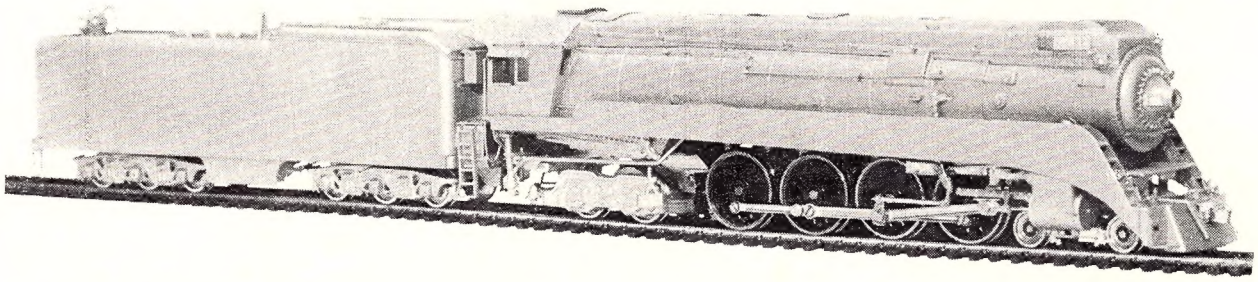
AUSTRALASIAN MODEL RAILROAD MAGAZINE

March/April, 1970
Vol. 4, No. 8
Issue 43
30 cents

Registered at the G.P.O., Sydney, for transmission by post as a periodical.

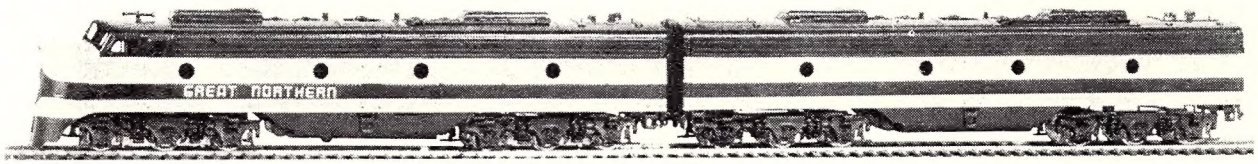


NEW — FROM THE STABLES OF BALBOA....



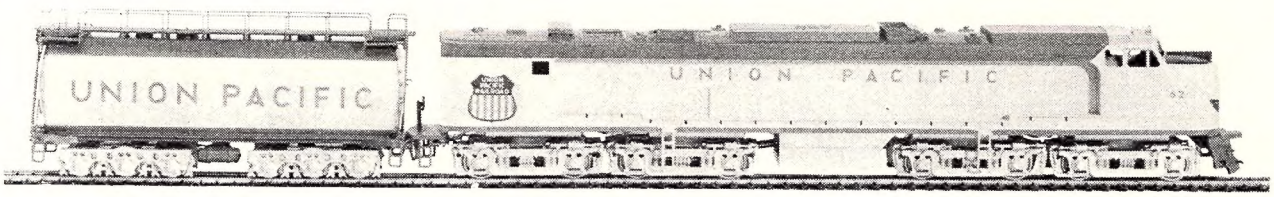
SOUTHERN PACIFIC 'GS-2' 4-8-4

In their colourful orange, red and black livery, these Lima-built 4-8-4's represented S.P.'s first excursion into loco streamlining. They were placed in service in 1937 to power the new streamlined "Coast Daylight" train between San Francisco and Los Angeles. The model is a member of Balboa's "Master Series", and maintains the high standards expected from these fine models. Quality of operation and dependability are paramount features. Length, 14¾ in. Weight, 35oz. ..... **PRICE: $134.50**



EMD 'E-8' A & B UNITS

These most popular 2250 h.p. cab units hauled most of the premier passenger trains in the U.S. Fans of EMD equipment will welcome this addition to Balboa's range.
HERALDS: G.N. "Empire Builder" (illustrated), S.P. "Daylight", N.Y.C., Santa Fe and U.P.
A UNIT: Length, 9½ in., weight, 19oz. ..... **PRICE: $65.00**
B UNIT: Length, 9½ in., weight, 13oz. ..... **PRICE: $29.55**

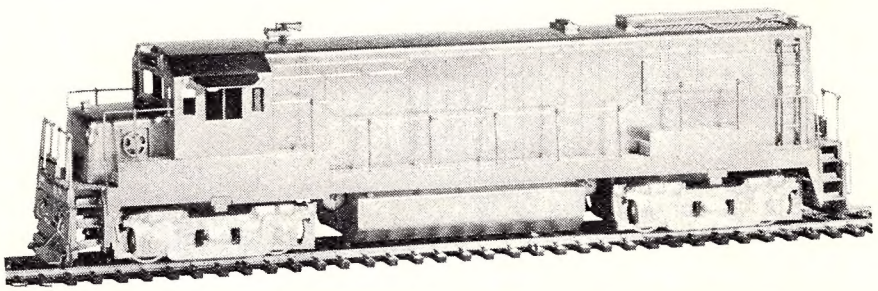


UNION PACIFIC 4500 H.P. "VERANDA" TURBINE

The U.P.'s '61' Class turbines were ordered from G.E. after the first ten of 1952 proved a success. These impressive units were highly distinctive, featuring catwalks or "verandas" running along both sides and a 24,000 gall. tender to give the necessary fuel capacity. The Balboa model captures all the majesty and power of this fine loco. Each model is factory painted and lettered. Length, 16½ in.; weight, 37oz. ..... **PRICE: $131.00**

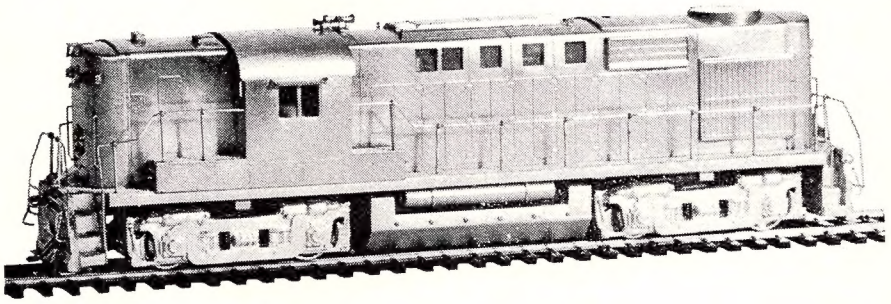
G.E. U25B DIESEL

The U25B, introduced in 1960, represented G.E.'s first complete locomotive for the diesel market. Later versions, with increased horsepower, were designated U28B and U30B. The model represents a late U25B or an early U28B and features a double photo-engraved and embossed body shell, a satin finish ready for painting and working headlights. All axles are powered. Length, 8¼ in.; weight 20oz. **PRICE: $51.00**



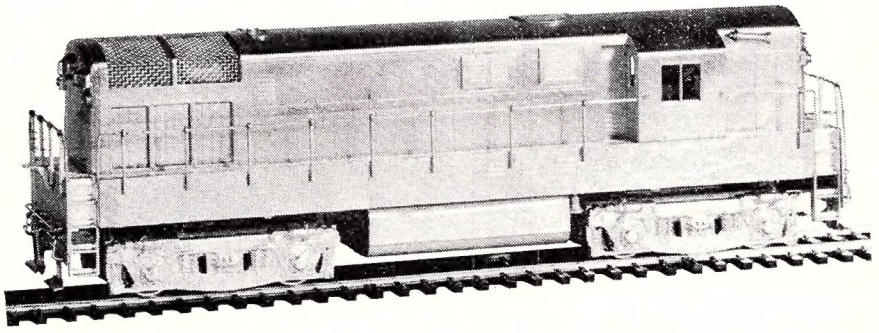
....AND KUMATA

ALCO 'RS-18' HIGH NOSE



This loco is the Canadian version (Montreal Loco Works) of the Alco DL701, 1800 h.p. hood unit and differs from the Alco original, mainly by the absence of the distinctive notches in the hood end. The model features a finely photo-engraved and satin-finished body, coined brass truck sideframes and working headlights. Length, 7½ in.; weight, 18oz.
PRICE **$51.00**

AIRBANKS-MORSE "BABY TRAINMASTER"



The Kumata model represents the "Baby Trainmaster" in its final guise. Earlier models sported either Loewy styling or a simplified version of these sleek lines. With its etched brass body, rectifier lighting, die-cast gearbox and fine meshen fan grills, this loco should prove popular with those requiring models of other than EMD or Alco products. Length, 7¼ in. weight 20oz.
PRICE **$48.20**

Other News from THE DOCKYARD . . .

N scale fans have long been awaiting arrival of both the MRC 2-8-4 Berkshire Locomotive and 2-8-8-2 USRA Mallet Loco. At last they are here and by the time these notes appear, stocks should be available from all Sekisui and Minitrains' stockists in Australia. Prices: Berkshire, $38.75; Mallet, $48.00. The former being available in Santa Fe and C. & O. heralds, the latter in Norfolk & Western and Santa Fe. Also to hand are limited stocks of MRC Passenger Cars, in C. & O. herald. These are of full length, ribbed sided type, and are detailed down to full interiors! Prices: Coach, $4.40; Vista Dome, $4.65; Sleeper, $4.40, and Observation Car, $4.40 . . . . Talking N scale, about the end of April, we are expecting more Sekisui 50' Steel Box Cars, 40' Wood Reefers, 40' Steel Box Cars, 40' Steel Reefers, 40' Cattle Cars, NYC 'J3a' Hudson Locomotives, PA Diesels (all 9 heralds) and more Controllers. For a full listing of this range, send stamped S.A.E. for covering Price List . . . . Latest arrivals from Tenshodo include a limited number of 'Shorty' Corrugated Passenger Car Sets, in the new and attractive G.N. 'Big Sky Blue' herald. Each Set comprises: 1 Observation, 1 Diner, 1 Sleeper, 1 Coach, 1 Vista Dome, 2 Combines and 1 Baggage Car. Price per Set, $112.60. Available separately, in Santa Fe herald, are: Baggage Car, $13.00 ea.; Coach, $15.10 ea.; Diner, $15.90 ea.; Sleeper, $15.10, and Observation Car, $17.00 ea. . . . . In HO traction, following upon the recent arrival of the North Shore Interurban Cars, now to hand are the P.E. 414 Class Niles-California Suburban Car and 1300 Class Arch Windowed Combine, both @ $41.50 ea. . . . . Newest in NWSL's range of quality HO brass logging locomotives, is the Weyerhaeuser 2-6-6-2T @ $102.00. To follow shortly and outside the field of logging engines, is the D & I.R. 'N-2' 2-8-2 with Vanderbelt type Tender . . . . Some months ago, in introducing our then new stocks of Phosphor Bronze Wire, in 50' coils, we mentioned that similar stocks, but in Nickel Silver, were coming up. These 50' coils are now to hand in the same gauge range and prices are as follows: 22G., 85c; 24G., 65c; 26G., 55c; 28G., 55c, and 30G., 55c. . . . . Also in nickel silver, for 0 gaugers, we are now offering a fine Vignoles Section (flat bottom) Rail, ideal for even the largest of our ¼" scale brass locomotives, @ 55c per yard. . . . . Those of us who are keenly interested in traction and enjoy collecting literature relevant to our hobby, will welcome the news that Brill's Magazine is to appear in reprint. Brill's Magazine was originally published by the J. G. Brill Co. of Philadelphia, the largest manufacturer of electric cars in the world. It was a trade journal which described cars built by the Company and its subsidiaries, including Wason, Danville, Stephenson and American. It also contained extensive information on technical operations connected with the electric car building industry and articles descriptive of major city transportation systems, both in the United States and in other parts of the world. Brill's Magazine was first published in 1907. It was issued monthly until July, 1917, and subsequently on an irregular basis until the last issue in September, 1927. A total of 146 issues was published. They are indexed fully and represent a major source of history on the evolution of the modern electric street and interurban car. These Magazines, particularly the earlier issues, are virtually unobtainable today and are quoted, when available at $4.00 up. Brill's Magazine will be reprinted at the rate of one issue monthly and in the order originally issued, beginning with Vol. 1, No. 1, January 15, 1907. Price is expected to be approx. $1.50 per copy, and those interested should advise us immediately these notes appear in print, the first issue being expected to be released in the U.S.A. about April. **STOP PRESS:** At last! More of ConCor's HO 85' ribbed sided Passenger Cars just to hand. Selling at the U.S. advertised price of $4.98 each, these fine plastic Cars come in full-length Coach, Diner, Vista Dome and Observation types. Heralds are: A.T. & S.F. and P.R.R. . . . . A new, large indent is also just in from Athearn. For covering new List, send your request with stamped S.A.E.

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A.M.C. publishes a monthly (or thereabouts) Model Railway Newsletter containing up-to-date news about items in HO/OO and N Gauge, etc., and another publication called 'Giant' for O Gaugers in addition to regular Folders containing prices, illustrations and information about lines handled. No charge is made for these. Should you wish to obtain direct supplies, write to the publishers, Australian Model Craft Co., Box 118, P.O., Albury, N.S.W. 2640. The following charges are made, mainly to cover cost of postage:

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The 'Railway Modeller' is THE British Model Railway Magazine with the largest circulation. Published monthly, the 'Railway Modeller' contains profusely illustrated articles by experienced enthusiasts as well as up-to-the-minute reviews of new products and many other items of interest. Periodically a Free Booklet explaining a particular aspect of the hobby is included. See your dealer now or write to Australian Model Craft Co. The subscription rate is $6.50 per annum. (Posted flat.)

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HO/OO

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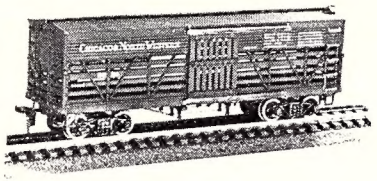

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* These cars are numbered alternatively 414 or 415. All items have X2F couplers fitted.

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The Australasian **MODEL RAILROAD** Magazine March/April, 1970 Vol. 4. No. 8 Issue 43

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Published bi-monthly by S.C.R. Publications, P.O. Box 204, Kings Cross, N.S.W. 2011, for the Southern Cross Model Railway Association Inc. All rights reserved. Registered at the General Post Office, Sydney, N.S.W. for transmission by post as a periodical. Printed by Publicity Press Ltd., 29-31 Meagher St., Chippendale, N.S.W. 2008. Subscription by mail: $1.80 Aust., N.Z., T.P.N.G., Elsewhere — A$2.80 per annum. Make cheques, etc., payable to S.C.R. Publications, Sydney, N.S.W.

EDITORIAL

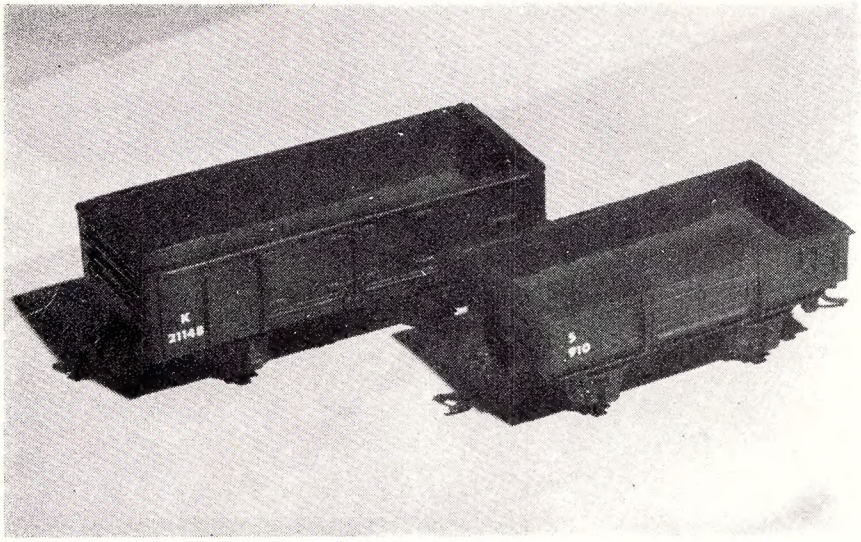
In October, 1967, at the Sydney Model Railway Exhibition, we witnessed the rebirth of the Australian model industry. In the early part of the decade we saw a British company produce some 3.75 mm models of various prototypes, ranging from mainline diesels to suburban cars. Later, the first of the now common Japanese brass locos arrived, to be quickly followed by a modeller, who produced rolling stock kits using imported parts. But it was in October, 1967, that the first entirely Australian kit arrived on the market, a group of modellers released a model of a N.S.W.R. refrigerator car in wood.

As time passed, new items were added to the range and other manufacturers entered the field. By October, 1968, the customer was offered kits made from aluminium, cardboard and wood. On the second day of this exhibition, there appeared a kit of which the majority of the parts were plastic castings. It was hailed as the perfect kit for the Australian Market and over 200 were soon sold. It was the end of all other materials and techniques, for at least a year. But, as time passed, problems arose. The kits would not fit, the sides warped or broke and there was disatisfaction in the ranks of the modellers. The makers went back to the drawing board and produced a modified plastic or changed to an alloy of metal to overcome the brittleness of these earlier kits. Unfortunately, in the case of some plastic using manufacturers, this did not come to grips with the other draw backs, which were present in the kits and it appears that the manufacturers are content to leave the situation as it is now.

During the last six months we here at A.M.R.M. have received several letters complaining about the quality and the price of certain Australian kits. In one letter, which was completely unprintable (except on asbestos paper) the writer complained bitterly about a kit of a bogie exchange vehicle he purchased while holidaying in Sydney. To investigate this complaint a staff writer of this magazine purchased a like kit from the same retail outlet as did the complainent. The writers report completely supported the complainent in what he had written. The main source of complaint was that the kit did not fit together. The reason for the failure of the pieces to fit was easily assertained as elementary measurement showed that the sides were 1/16" thicker than the recess provided in the end castings to take them. Secondly, the manufacturer had failed to include the bogie center dimension, which made the completion of the kit impossible. As our correspondent said (in slightly different words however) that he has paid several dollars for useless bits of plastic and wood.

We here at A.M.R.M. appreciate the fact that the limited market in this country does not allow mass production as in Europe or the U.S.A., but I do feel that a change for the better must soon come or the average modeller who does not have a fully equipped workshop at his disposal will desert the local prototype for overseas products, which are preassembled or readily assembled by even the least experienced modeller. The latest brass locos are so well detailed as to positively shame the wagons being marshalled behind them. But to be fair to all concerned it must be remembered that not all complaints come from the modeller. The manufacturer also has much to say. Countless times he is told "I will buy a . . . . class" if you make one. But, however, when the model is produced the potential customer is suddenly among the missing. A model manufacturer in a country like Australia is faced with the problems of small market and large distances which are further complicated by the fact that unlike the U.S.A. the local railway administrators never built standard locos or rolling stock, thus a loco of V.R. outline would have little attraction outside it's home state.

It should therefore be obvious, that if the Australian model industry is to survive, and I feel it has to, then co-operation between modeller, manufacturer and all others associated with the hobby must increase or the industry will at best not develope to it's full potential.



ARMCHAIR REVIEW

NSWR "S" & "K" Trucks. Produced by M.R.C. Models. Supplied by Mini Models, Parramatta. Available from leading hobby shops. Price $2.35 ea.

The prototype "S" and "K" trucks are both 4-wheeled open wagons of the NSWGR, having capacities of 15 tons and 24 tons respectively. There are approximately 7,600 "S" trucks and "K" trucks in service, so that it is unusual to see a goods train, other than the high speed goods trains, without a smattering of "S" and "K" wagons in the composition.

The kits come packed in clear plastic bags with instruction sheets enclosed. The parts are moulded in a polyester type plastic. This plastic may be filed, drilled or sawn with a jewellers saw, with ease. The plastic is slightly sticky and the dust from filing tends to stick to the parts. A brisk brush with an old toothbrush will soon remove this dust. The plastic is fairly brittle, but strong. A completed "S" truck was accidentally dropped from the reviewers workbench onto a hard floor and survived unscathed. The parts as supplied, were surrounded by a considerable amount of flash, but the majority of this may be snapped off with a small pair of pliers, while the remainder can be removed with a few file strokes.

The instruction sheets, which include an exploded diagram, are fairly precise. The most effective method of joining the parts is by the use of contact cement. The body of the "S" truck fits together very easily. However, because of a slightly different method of construction for the "K" truck, a fair amount of filing or sanding may be required to reduce the thickness of the sides before assembly, to produce satisfactory joints. Axleguards and wheelsets are included in the kit. Holes must be marked and drilled in the axle guards for the ends of the axles to fit into. This is a difficult job for the inexperienced modeller and the manufacturer could have provided premarked, if not pre-drilled, locations for the axles. It would not be difficult to break an axle guard while working on them and so it would be a good idea if the manufacturer included a spare in the kit. Gluing the axleguards and wheelsets into the body is not an easy task by the nature of the kit. However, by gluing one set of axleguards and wheels into place and letting them set, before the second set is aligned and glued, a model which sits on all four wheels can be produced. Plastic dummy couplers are supplied, but are too weak to be used for anything but static display. All parts showed fairly good detail and were free from defects, except the two dummy couplers, which were unuseable because they were riddled with air bubbles. The plastic from which the models were made from is slightly sticky and apparently because of this, paint seems to "stick" to these models very well.

There can be a considerable amount of enjoyment derived from building these kits if a bit of time and care is taken. To sum up then; sturdy, fairly well detailed kits at a fair price.

R.G.K.

LFA, LBB Class Loco Hauled Suburban Cars, 3.5mm. Scale. Produced by Friedmont Models. Supplied by Mini Models, Parramatta. Available from selected hobby shops.

Price $3.15

The LFA, LBB Class cars were built as a wartime emergency measure in 1944. Parts of condemned end loading cars were used in the construction of these new cars as an economy measure. A total of 32 cars were built, of which 24 are represented by this kit. The remaining cars were coded HLF and are different in that the roof over the guard's compartment is rounded off at the end. The cars are marshalled into four 8-car sets, coded BOB and numbered 22, 72, 73 and 74, with an HLF at either end. The cars are presently used mostly on Illawarra, Richmond and Newcastle area services.

The kit is moulded in a plastic which is known by the trade name of "Esterflex". The external detail on the car was very good in general but was spoilt by air bubbles, especially in the beading and letter board, which did tend to detract from the finished product somewhat.

The kit comes in a white cardboard box and consists of sides, ends, roof, floor, interior partitions, bogie sideframes and dummy couplers. Except for the roof, floor and interior partitions, all parts are plastic. The floor and partitions are balsa, while the roof is an excellent piece of wood moulding.

The first step in the construction of this kit is to remove the flash, which was easily done by filing. It was, however, noticed that the filings had a tendency to stick to the car, necessitating extra cleaning prior to painting. The plastic in the kit is quite strong and should endure all normal operational wear. (Don't drop it on concrete or it, like any other model, will break.) Parts are glued together with contact adhesive as shown in the instruction sheet provided. These instructions are quite good, but omit to give two important pieces of information; the names of any suitable adhesives (I used Bear Brand quite successfully), and a paint scheme for the finished car. I know these cars have had at least two colour schemes, but I do feel detail of at least the present

extremely simple one could have been supplied.

The bogie sideframes supplied in the kit are extremely brittle due to their thin cross-section, and I feel the average modeller should fit some proprietary bogie. (See SCMRA's book, NSWR Passenger Cars (Loco-hauled) for further details, picture, etc.—Ed.). The dummy couplers supplied could be used within the set with auto-couplers mounted on the ends of the terminal cars.

Upon completion of the car, dimensions were checked against a plan. The main fault found was that the car was 1'6" under length and 7" over width, which tended to give the car a shorter appearance than the prototype. Two items which I feel should have been included were buffers and roof ventilators. I used brass nails which gave a good appearance for buffers, but I had to hunt all over the workshop for suitable sized ones. These could be added to the kit for less than a cent, and I do feel this would add to the kit's appeal. In respect of roof ventilators I used some commercially available torpedo ventilators although again nails could be used.

In general, I feel the kit is quite good value and as it is the first loco-hauled car ever produced in this country, it has a place on most layouts, either as an eight-car set or in smaller non-prototype sets.

R.W.M.

Lima Nickel Steel Track, HO Scale. Supplied by Levensons, Sydney.

This range of track has just changed from extruded brass to a nickel steel rail and added some new items, a 36° crossing, 18" radius track, an expanding track and a manual uncoupler. The points have been improved in the rail material changeover.

The points will run only Triang and NEM wheels. If the frog is filed back carefully, NMRA RP 25 wheels will run through it successfully.

The point blades are formed from thicker sheet and are more rigid than their predecessors. The points are a non route isolating type. If the two strips that contact the blades are pushed down out of contact with the stock rails they become route isolating. The electric operated type has a built in point motor that is very positive. The blades are sprung in position, so even light cars can trail through in safety. The price of the electrically operated point is $2.25 each. Dimensions:

Gauge: 0.665"-0.650".

Flangeway depth: 0.064".

Guardrail flangeway width: 0.065" straight, 0.078" curved.

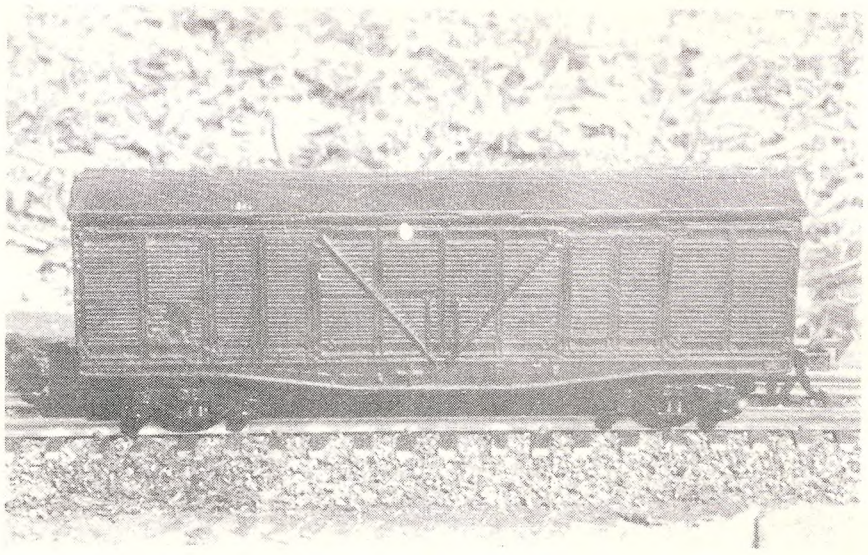
Frog flangeway width: 0.060".

Rail height: 0.105".

Rail material: Nickel steel alloy.

The operating mechanism fouls S-7.

R.J.T.



Protype Models, N.S.W.R. MLK/MLV Louvervan. Supplied by Hobbyco Ltd., Sydney. Available from leading hobby shops. Price $4.50.

This is a model of one of the many vastly different louvred box cars coded MLV.

Tie castings have locating grooves for ease of assembly; they are very free from flash and any present can be easily removed with a modelling knife.

The car is available with alternate roofs, either smooth top or corrugated iron. For either of them 1/16" must be trimmed off each side of the milled roof to set it down to the locating flanges cast on the sides. For the smooth roof, the narrowed roof is filed flush with the sides and ends and filed smooth. The corrugated iron roof is glued on top of the wooden roof piece.

The instruction sheet is minimal and the section concerning the roof is wildly in error. These 2 points are the only detractions on this well detailed car, its weight all up is what all cars should be when SCMRA RP 25 is used. The car takes paint very well and by painting the letter board white and touching up the raised lettering the car is bettered. All in all, a nice vehicle, but considering its price, the design and detailing errors, should not happen.

R.J.T.

Graham Farish 'Formoway' Points. Supplied by Pizzey Pty. Ltd., Importers HO scale.

This large range of pointwork has been just released in Australia. It is compatable with existing ranges by other manufacturers. It will serve to greatly enhance the total range of trackwork components for users of universal and scale wheels in Australia.

The points, crossings, track, etc. has a very fine woodgrained brown plastic sleeper (0.73" x 0.139" x 1.273" at 0.335" spacing). The rail has a pleasing realistic cross-section and a rounded head. The blades are not pivoted or hinged, but free for 3" back from the blade ends. The slip switches are set midway and all points preset to one road, so that relays may be used for operation. I found that a Tenshodo point motor had no trouble moving the blades and the Graham Farish hand throw was equally up to the mark. The end holes in the throw are metal reinforced.

The points have a plastic frog, wing and guard rails cast integrally with the sleeper base. All rails are live and the point is not route isolating. The connections are by spot welded straps across under the sleepers. A comprehensive instruction leaflet is included with each point. The packaging is attractive and robust.

I had no trouble in operating NMRA RP25, Triang, Rivarossi, or NEM wheels over these points and SCMRA members will be able to see that they conform closely to the proposed transitition standard 'Track S 13' published in the Booster No. 11, July/August, 1969.

The range available is:

3 foot radius point, left and right hands; 2 foot radius point, left and right hands; 2 foot and 4 foot radius, left and right hands; curved point; Single slip to match 3 foot radius point; Double slip to match 3 foot radius point; Long crossing to match 3 foot radius point; Short crossing to match 2 foot radius point; 3 foot length flexible track.

CONTAINERS IN OPERATION

by Rodney Tonkin

The idea of containerisation goes back to the 1830's when the Gentry had their coaches lifted off their wheels and placed on flat cars. In the 1930's, the Pennsylvania Railroad introduced containers for LCL operations (Redball in the U.S. make a kit of these cars and containers). In 1945 Commonwealth Railways placed its first container order with Freighter Industries.

All these early containers worked inside a one owner system; whereas later systems such as the Australian & New Zealand Railways standard systems were interchangeable. The final outgrowth of these systems has been the I.S.O. standard range of containers.

Many operators still have, and are evolving, non-ISO or SAA standard systems to suit special needs, or prevent their containers from being spread all over the country. Such non-standard systems include the Australian National Line extra wide container flats; and the Associated Steamships Pty. Ltd. extra high containers, which are built to Australian but not world specifications.

The basic advantage of the container is the ease and speed with which containers can be switched from one means of transport to another. This speeds the turnround of the equipment concerned; and cuts down the opportunity for pilfering. However, they need special vehicles for carriage and transfer from one means of transport to another. The transfer equipment includes specially equipped cranes, straddle carriers, forklifts, and specially equipped trucks. Special containers which can be transferred without heavy equipment are the Freuhauf Flexivan system, and the Freighters side transfer system.

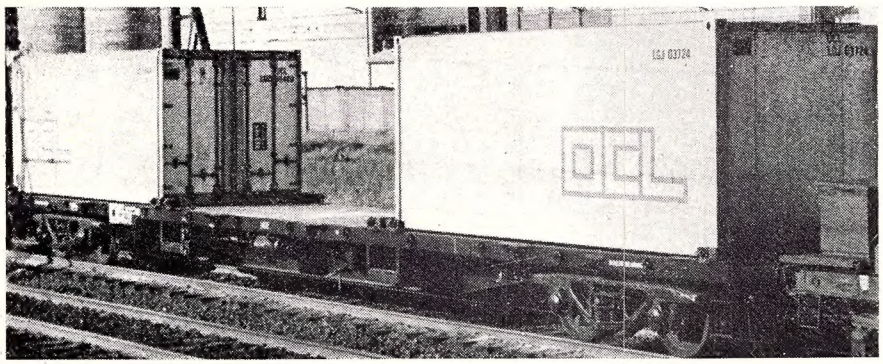
It has been estimated that 80% of the land movement of containers is by rail. This means that any post-W.W.II model railway layout can have containers in one form or another. The rail movement of containers is in three basic types: Land Bridge; Import-Export; and Internal Transit.

Land Bridge operations would be, for example, coast to coast in the United States. The containers are unloaded from ships, across the country by rail, and then are loaded onto another ship. This type of operation would involve high speed block trains such as the "Super C" of the Santa Fe.

Import-Export operations involve the moving of containers from the port of entry to unloading point to reloading port and back to sea. The containers may be loaded on the rail car. Import-Export and Land Bridge operations use ISO, STO and private shipping containers.

Internal Transit is the movement by rail of container loads assembled by forwarders such as Brambles, Alltrans and T.N.T.; into large 37ft. lift-on and slide-on flats or vans, or flexiflats, flexivans, and small LCL containers. These trains usually run at night, and at passenger train speeds between large cities. This class of operation would be the largest in Australia. The containers used vary from the N.S.W.R. LCL container (plan in Vol. No. 7 of this magazine), up to the 37'-0".8'-2½".8'-6" Freighters Transivan. The mild local climate means that much traffic is carried on container flats with side gates and tarpaulins (these are mostly in the larger sizes).

As you can see, containers are a significant feature of modern transport; and with the passage of time are rapidly becoming more important. If your layout has an importer or exporter for a customer, or if you model the mainline, containers could be for you.



Containers go by rail. Two 20ft. ISO containers on a N.S.W.R. "OCX" Class flat wagon. Photo: G. Ball

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SOUTH AUSTRALIAN RAILWAYS COAL GANTRY

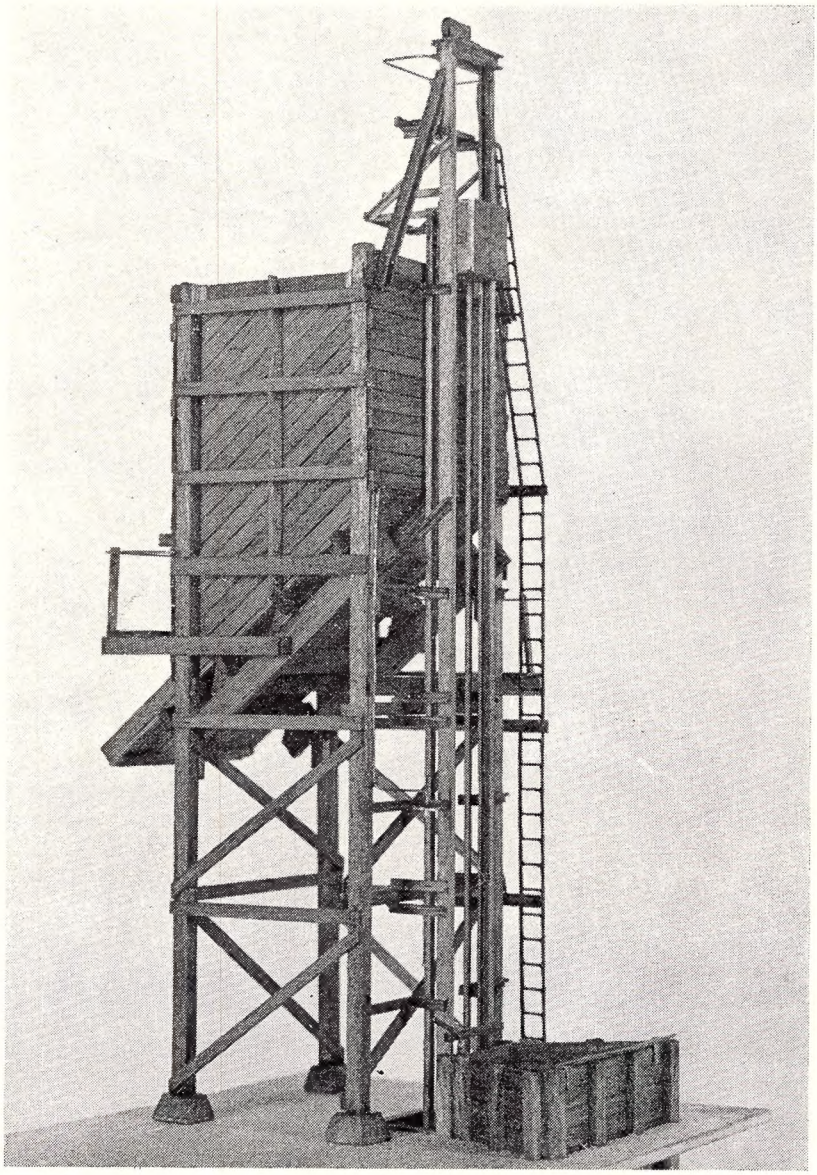
By Peter Fehlberg and Hugh Williams

PHOTO AND PLAN BY AUTHORS

Of the many problems confronting the railway modeller, utilising space on the layout to the best advantage would cause one of the main headaches. One structure that uses available space to the best advantage is this South Australian Railways coal gantry, which in the model form takes up only a few square inches of a layout and makes an extremely interesting and good looking model.

A number of coal gantries of this type were built in South Australia at localities such as Riverton, Eudunda and Strathalbyn, all of which are approximately sixty rail miles from Adelaide.

In addition, at least three were built on the narrow gauge Eyre Peninsula Division, their purpose being to replenish coal supplies of trains en route.



Its Mechanics

In order to build an accurate model of the coaling gantry, an understanding of how it worked would help. The structure was placed between two tracks, coal being off-loaded from one of these from railway wagons into a storage bin at the back of the gantry. This in turn fed a skip which was lowered into position to the bottom of a pit. A winding wheel and motor housed in a small galvanised iron shed next to the coal gantry was used to hoist the skip to the top of the tower where coal was tipped out of the skip into the 15 ton capacity hopper. The method of tipping the skip is simple. Two guiding wheels on top are mounted near the pouring lip, i.e. off-centre of the skip, and run on an inside guide while wheels at the bottom of the skip are centred and run in an outer guide of channel. The plan shows how the inside guide turns to a horizontal direction at the top of the main hopper while the outside guide continues on vertically. The skip automatically inverts itself as the top wheels travel from the vertical to the horizontal plane and the bottom wheels continue in their vertical direction.

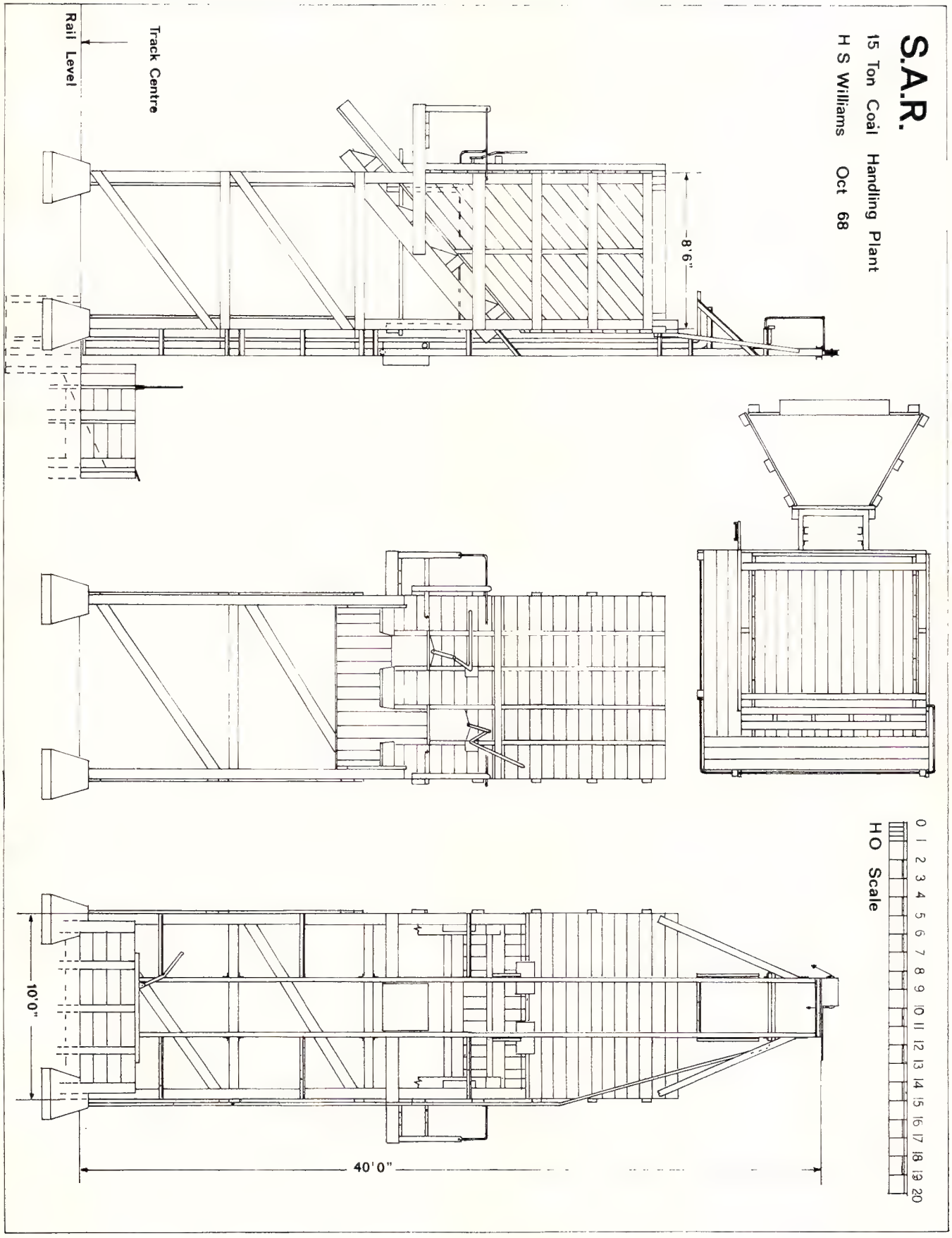
Construction and Materials

Construction is reasonably straight forward, but rather time consuming due to the number of small bits and pieces. By cutting channel, angle and other timber shapes to a greater degree of accuracy than can otherwise be obtained from ordinary timber sizes made construction time somewhat longer. All construction was made from simple and readily obtainable materials, mainly North Eastern Woodshapes, while the cost is not unreasonable when compared with that of a kit using woodshapes.

Materials used were as follows:

1 length 3/32" square
1 length 1/16" square
1 length 1/16" x 5/32"
3 lengths 1/16" x 1/32"
7 lengths 1/32" x 3/32'

(Continued Page 16)


S.A.R.
15 Ton Coal Handling Plant
H S Williams Oct 68
Rail Level
Track Centre
8'6"
10'0"
40'0"
HO Scale
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

AUTOMATIC 3-ASPECT COLOUR LIGHT SIGNALS

by R. Merriman

SPECIAL NOTE: This system of automatic operation may not work on layouts utilising thyristor or transistor controllers because the inductance set up by the series relay can cause unpredictable side effects with these controller units. An electronic detector could be used to replace the series relay but I do not know what would be the best to use. Ask your local hobby or electronics dealer.

As layouts expand and become more complex, it quickly becomes apparent that the operator is unable to perform all the operations necessary for realistic operation. Many suggestions have been put forward as ways to lighten the load on the operator and thus allow more trains to be run. (A method of branch line train operation was shown November-December 1969 AMRM.—Ed.) The most obvious way of lightening the load is to look to the prototype and see how the Railway Engineer has reduced the amount of labour required. The most interesting facet of this staff reduction is in signalling. Safe working on double line was, from its inception, early this century (in fact it is still used in many parts of Australia), by block signalling. This practice involves the use of expensive interlocking machines and a large number of staff. This situation altered radically with the introduction of automatic signals in the early part of this century. The first installation in New South Wales was on the North Shore line between Milson's Point and Hornsby. This allowed many smaller signal boxes to be closed and a great staff reduction to be made. As the science of signalling improved, the Railway Engineer advanced to route setting such as at Campbelltown in New South Wales, or Centralized Traffic Control such as on the Victorian Standard Gauge line. It is thus apparent that the easiest way to lighten the load on the operator is to install automatic signalling.

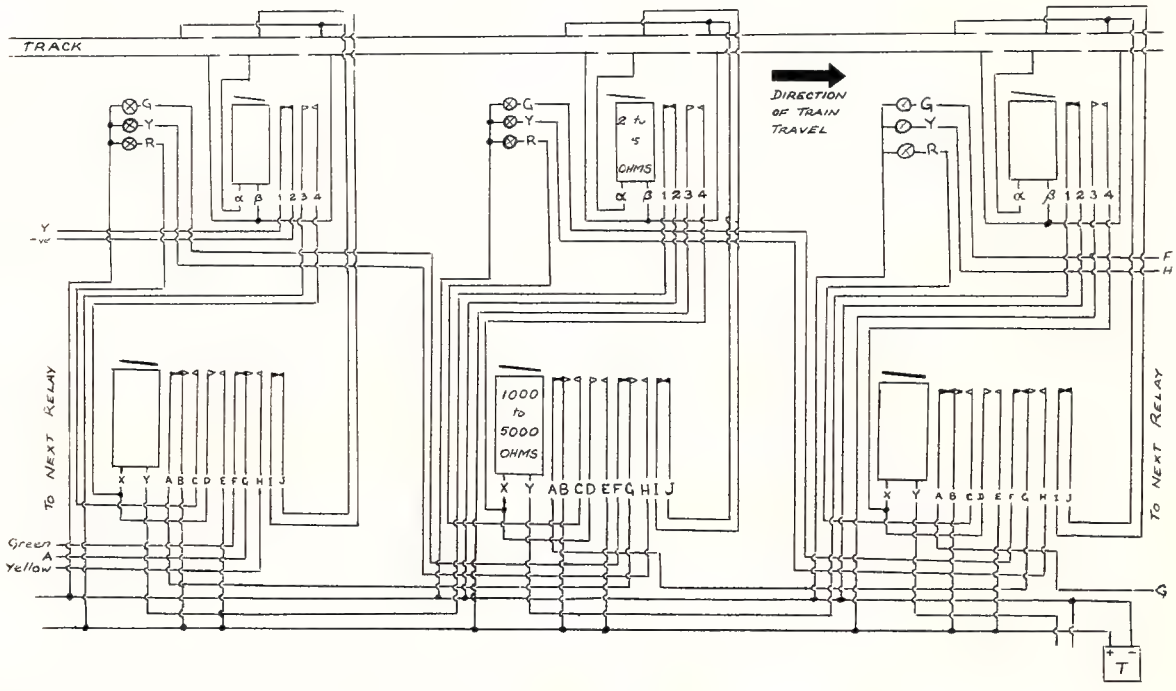
This is not as difficult to construct as it may seem. All equipment needed is available at disposals stores in most capital and other cities. As was said in a previous article on point motors, it is a good idea to shop around the various stores, since I have seen relays priced from 25c to 75c. Signals used in my design are Japanese 3-light type as available from most Hobby Shops. (Later in this article I will deal with modifications for 2-light and semaphore type signals).

Two (2) types of relay per signal installation are required, viz.

(1) 2—5 Ohms with 1 set of make (NO) contacts, 1 set of break (NC) contacts;

(2) 1000—5000 Ohms with 1 set of make (NO) contacts, one set of break (NC) contacts and 2 sets of changeover contacts.

Contacts on relays can be altered by a system of contact swapping until the desired configuration is achieved. Once you have assembled the relays with the designated number of contacts it is



a good idea to screw the larger (i.e. 1000—5000 Ohms) on to a base plate. (The one on which they come is ideal for this purpose). The smaller relay (i.e. 2—5 Ohms) should be secured near the signal installation. The bracket detailed in the point motor article (Sept. - Oct. 1969 AMRM—Ed.) would be ideal for this purpose.

Once the relays are installed, the next job is to wire them. To simplify the explanation and the job itself I have numbered the contacts on the smaller relay (from this point called the SERIES relay) and lettered the contacts on the larger relay (now called the ACTUATING relay).

SERIES RELAY:

Contact No. 1—to previous actuating relay coil terminal "Y"

2 — to transformer negative terminal

3 — to co-acting actuating relay coil terminal "X"

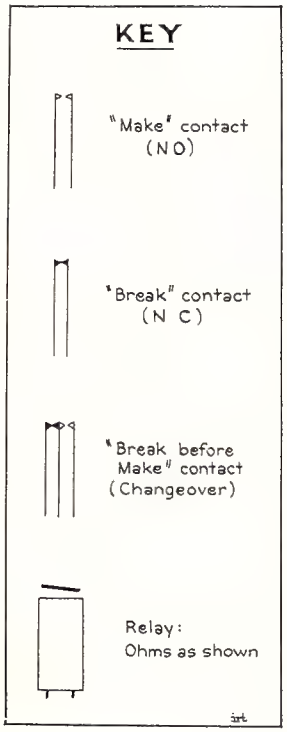
4 — to transformer positive terminal

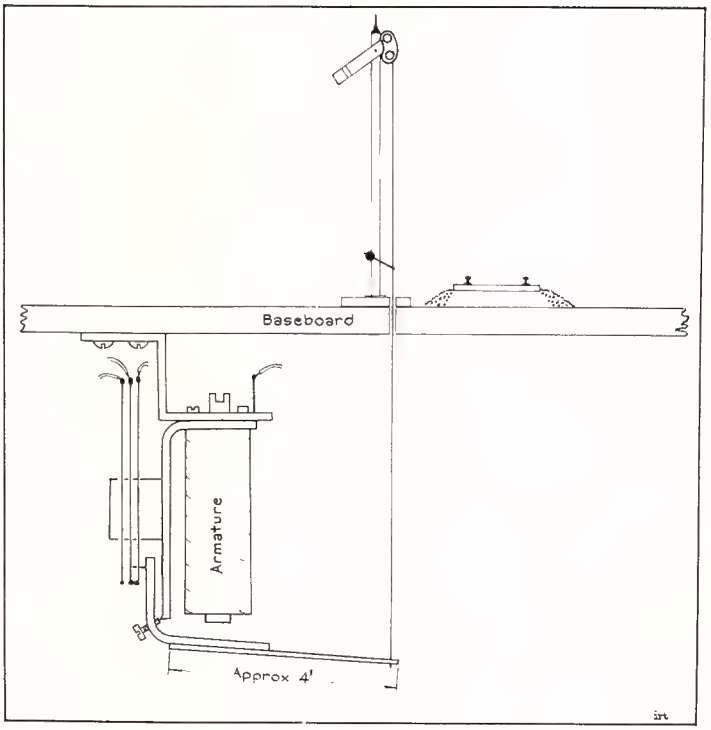
Contacts 1 & 2 deactivates the previous actuating relay.

Contacts 3 & 4 activates the co-acting actuating relay.

N.B. Negative and positive are purely arbitrary. I use the terms to show which wires are connected to the same terminal on the transformer. Coil terminals X and B on the series relay are connected as shown in the diagram. B is connected to the bypass wire while X is connected as shown to the "train-stop" section.

Now we come to the wiring of the actuating relay. For ease of maintenance





I suggest that the relay wiring be done with single core wire rather than multi-strand wire. This allows the wires to be grouped, which makes them easy to follow and thus easy to maintain.

Actuating Relay

Contact A — to contact G of next actuating relay

B — to positive terminal of transformer

C — to red globe

D — to coil terminal "X"

E — to transformer positive terminal

F — to previous signal green globe

G — to previous actuating relay contact A

H — to previous signal amber globe

I — to track adjacent to "train-stop" section

J — to "train-stop" section

Thus the contacts can be grouped. Contacts A, B and C determine whether the signal will display red or green/yellow. Contacts F, G and H determine whether green or amber will be exhibited on the previous signal. Contacts D and E act as a holding device. This is necessary because the series relay will deactivate immediately the locomotive moves off the "train-stop" section of the track. Without this device the actuating relay would also deactivate, and cause the signal to display green or yellow. The device works as follows. Electricity from the transformer positive terminal flows to contact E.

When its series relay causes the actuating relay to activate, contacts D and E close, permitting electricity to flow through contact D to coil terminal X completing a circuit which holds the relay at status 'ON'. It is deactivated by the next series relay using contacts 1 and 2, which are normally closed. This is because the electricity, after leaving D, flows to X, through the coil to Y, to contacts 1 and 2 on the next series relay and back to the transformer negative terminal. When contacts 1 and 2 break, they cause the previous actuating relay to deactivate, and a yellow aspect is again displayed. Contacts F, G and H cause either yellow or green to be displayed on the previous signal. The electricity from contact A on the previous actuating relay flows to contact G. Depending on whether this relay is on or off, the electricity will flow to:— F; relay off — green aspect displayed H; relay on — yellow aspect displayed Contacts I and J act as an emergency train stop. They prevent the train from passing the signal while it is displaying a red aspect (just as in the Sydney and Melbourne metropolitan systems).

IMPORTANT

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Considerations

When laying out this system two related factors must be considered. The first is the braking distance of your fastest train. This is to allow you to ascertain the length of the "track stop" section. It must NOT be of a length that any loco can overshoot. About 2' is a good starting point for investigation, as I have found my locos vary between 1'6" and 2'9".

The second point of consideration is the length of isolating section. I have found that this section should be about 18" but again experiment on this is a good idea.

Modifications

This system, although designed for 3—aspect coloured light operation, is easily modified to be used with either 2—aspect coloured light or 2 position semaphone operation. For 2—aspect coloured light operation, contacts F, G, & H are eliminated. Contact A is now connected directly to the green light on its signal. For modification to semaphore operation, contacts A, B, C, F, G and H are eliminated, but the actuating relay must be mounted as shown in diagram no. 2 directly under the signal it is required to operate. The length of the arm from the relay armature would again have to be determined, using different lengths; about 4" has been found ideal for HO semaphores. Although the bracket has to be bent into a virtual "Z" shape. the one described in the point motor article would still suffice.

In the next issue I will detail methods of starting and finishing, as well as a method of signalling junctions.

TO BE CONT.

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MIXED GAUGE

by Spencer Street

I am sorry that I missed the last issue but I was sampling the ride on the INDIAN-PACIFIC between Sydney and Perth. I can thoroughly recommend the trip to anyone who wants to see this big, big country from air-conditioned luxury, at ground level. For variety the return trip was made through Melbourne. While in Victoria I took advantage of VR's "all line" ticket to see much of the state. Oh, for all line tickets in other states.

Since the introduction of standard gauge operation N.S.W.R. & SAR have commenced pooled guard van services. N.S.W.R. IHG class No 31689 to 31700 and SAR 8300 class No 8364 to 8374 are the main vans involved. The IHG's are used on any standard gauge east of Port Pirie while the 8300's can be used on any broad or standard gauge train in the same area. As an example 8300's have been seen at Albury and Newcastle on the NSW east coast, a long way from their birthplace at Islington. This means that modellers can now operate interstate guards vans as well as interstate passenger and freight stock (does this mean loco pools will be next; to move wheat or other seasonal products?)

For the first time this year I have completed an Australian kit. It was very simple to put together, did not even need glue. The kit was presented in plastic and took only 5 mins. to assemble; and the detail was more than presentable. The kit was one of a series including locos rolling stock and even model road vehicles. Where did I get it from? Out of a breakfast cereal packet.

Word has reached me that Protype of North Sydney is running a competition for the best load for one of their "S" trucks. A prize will be awarded at the Sydney Exhibition to be held as usual on October 3, 4 & 5.

The Melbourne International Meet is now history and many modellers are now home again in the four corners of the world richer for their stay down under. Favourable comment was passed by all on the organisation of the meet and I offer my congratulations on a job well done, to all who gave their valuable time to assure the success of the venture.

Want a special trip for Christmas? Read the S.C.M.R.A. section of Club Car.

With the Royal Tour well under way the N.S.W.R. has issued the consist and details of the special train to Orange. Several interesting points have emerged from these announcements. The first point is the locos. The special is hauled throughout by two 422 class 2200/2000 hp diesel locos instead of Indian Pacific style with 46 class electrics between Sydney and Lithgow and either 421 or 45 class west thereof, within the state. This will be the first time the 422 class has crossed the Blue Mountains. (A trial trip was run on 19/3/70 using the locos and cars) The second and probably the most interesting is the train's consist. Instead of using Railway's Of Australia stock as would be expected, Southern Aurora (S.A.) stock is being utilised Does this infer there is something amiss with the new train, or is it political?

For the record the diagram of the train is; from the rear,

MHN . . . . . S/A Power Car

NAM . . . . . S/A Twinnette Sleeping Car

SSA . . . . . C.R. Special Service Car

RMS . . . . . S/A Dining Car

ARM . . . . . ROA Deluxe Twinette Sleeping Car

PHN . . . . . S/A Power Van

6/250 tons — Allowed 5 hours 27 mins. for 200 miles.

The Royal Family will travel in the SSA for the overnight journey and will eat breakfast while the train is stationary at Newbridge; between Bathurst and Orange. (I wonder if anyone will assemble the kit in the cereal packet at the breakfast table?)

The N.S.W.R. has, for the first time, traded in some of its original mainline diesels on new units. Does this mean we will see the emergence of "Honest Joe's Used Loco Lot"?

Attention, all fans of the Blue and Gold! (I don't mean followers of any football team, either!) Word has reached me that Malric Models of Melbourne will soon release a range of VR 4- and 6-wheel vehicles in HO gauge (16.5mm track). They will be cast in plastic and the range will include open wagons, covered vans and a brake van. The release date is expected to be some time in June. Watch this magazine for more details.

No! You did not miss the advertisement for AMRM Back Nos. A completely revised list will be published next issue. ALL issues previously advertised are still available except for some of the low numbers below 20.

ON THE COVER:

A scene on Bill Coles' layout, showing his scratch-built 710 Class 2-8-2 of S.A.R. Photo by P. Clarke

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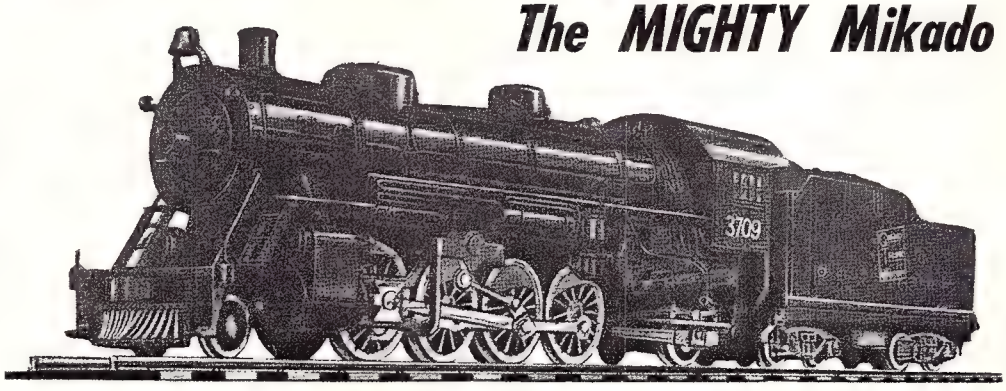
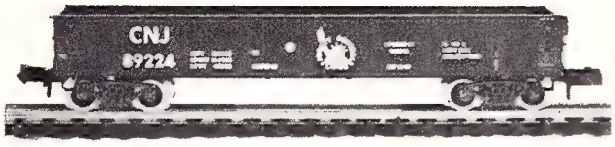


2180

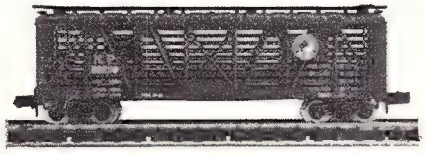
The latest in the Atlas line of U.S.A. steam locomotives is this GTW Mikado 2-8-2 loco and tender with working headlight. All driving axles are geared and plastic tyres are an added aid to traction. The finish is black and length of loco and tender is 160mm. No. 2180 ..... **$27.50**

Currently, there are four types of steam locos, 20 diesels, 20 coaches and 29 freight vehicles in the Atlas range. Items are regularly added to the range and to keep abreast of these, ask your dealer for the Atlas New Lines Folder which also contains a list of all Atlas lines, including track.

OTHER RECENT RELEASES



2403 CNJ Standard Metal Gondola, Black, 83mm. long **$1.95**
(Also 2404 Southern)



2413 Nthn. Pacific Cattle (Stock) Car, Brown, 83mm. long **$2.35**
(Also 2412 Santa Fe)

2431 Santa Fe Bay Window Caboose, Red, 78mm. long **$2.35**
(Also 2432 U.P.; 2434 S. Pacific; 2436 Burlington.)

2171 GP40 Bo+Bo Diesel Electric Loco, Santa Fe, 110mm. long **$11.95**

2173 GP40 Bo+Bo Diesel Electric Loco, Burlington, 110mm. long **$11.95**

2562 Double Slip Point, electrical operation **$7.95**

2297 Union Starch 3-dome Chem. Tank Car, Red, 83mm. long **$2.65**

2362 D & RGW Wood Sheathed Box Car, outside braced, Black, 83mm. long **$2.35**

2421 Clinchfield 8-bin Hopper Car, Black, 83mm. long .. **$2.50**

2265 Dupont 1-dome Chem. Tank Car, Silver & Black, 83mm. long **$2.65**

2296 Gulf Oil Corp. 3-dome Tank Car, Blue, 83mm. long .. **$2.95**

2373 G.N. Flat Car w/stakes, Black, 83mm. long **$1.95**

2392 SF 'El Capitan' Reefer Car, Orange-Tan, 83mm. long, **$2.35.**

2404 Southern Gondola, Silver, 83mm. long **$1.95**

2424 Erie Lackawanna 8-bin Hopper Car, Black, 83mm. long **$2.50**

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Continued from Page 10

1 length 5/64" channel
1 length 1/16" angle
6 inches brass ladder stock
Shim brass, fine soft wire such as 8 amp fuse, stain.

When building a model out of timber, better results will be obtained if the woodshapes are stained before being built. A mixture of duco thinner and Humbrol Matt Black was used for this model, but whatever you use, experiment with your colour on a piece of your scrap timber first. Do not make it too black and beware of the evaporating thinner fumes.

The methods of building a given model are, roughly speaking, directly proportional to the number of models built. However, as there are a few pitfalls to be encountered, we will briefly describe how it was built. Measurements can be taken straight from the plans for HO. First cut the four main legs, taking note that the front two are shorter than the rear. Cut the front and rear timbers for the coal hopper proper and glue to the outside of the legs. Cut and glue four vertical timbers to the face of the hopper, slanting the bottom ends where they come into contact with the chute. The best way of cutting the timber for the sides of the bin is to draw a template to scale, place the wood on it and cut each piece to its correct size, noting that the timber will be glued to the inside edge of the legs.

With the aid of masking tape or pins, the side timber should be kept in place on the template while cementing the vertical bracing timber to them. The side unit can then be removed as one piece from the template and glued to the front and back assemblies. After you have cut and glued the flooring to the structure, you will have the main box shape of the bin. The model should now be quite sturdy. Having cut and glued the cross beams to the bottom of the hopper, the next thing to fix is the two main bin support timbers to the inside edges of the legs. The front, rear and side bracing on the legs can then be fixed in place. Note that the bracing on the front and back is fixed on the inside of the legs while the two sides have bracing on the outside of the legs. At this stage the platforms on the front and left hand sides can be made and glued into position. We suggest you leave the handrails to later.

The skip guides are made from angle and channel fixed to stabilising sections of angle. Do not forget to allow extra length in the guides because they descend into a pit which must be cut out of the baseboard. Accurate measuring is essential to ensure that all four guides remain parallel. Fix the guide assembly to the rear of the structure. As this is quite a focal point of the coal gantry care must be taken in alignment. The tower assembly at the top of the skip guides is made up of the two diagonal stays of channel, the horizontal guides which invert the coal skip, the platform and safety railing,

(Continued on Page 18)

FOR THE YOUNG MODELLER!

B. A. R. GARRATT

Previously in this series we have talked about the type of track plan you will find most suitable for a starting layout. By now you will have spent many hours drawing diagrams and generally trying to make what you want fit into the space which you have available. By now I trust that you have drawn yourself a scale plan of the layout as you would like it to be. Now the next step is to get to and build it.

Now before we start, don't think that you will save yourself money by using any old timber which you find laying around. It is wise to start by buying some new. This way, you will find that you will get a much better base on which to build, and when the time comes, and it will, when you want to rebuild a section of the layout the timber will be good enough to use again.

There are many types of timber which are suitable for a baseboard. Radiata pine is a reasonably priced timber which is readily obtainable and it is easy to work. However, for bench work it has to be well braced. Kiln dried hardwood is another type which is readily available, but most types are very hard to work, and so I cannot really recommend it for use. The best type of timber is oregon pine. It is stable, and easy to work with, although care must be taken as it tends to split if nailed too close to an end. Despite this, it is widely used by modellers and provides an excellent base.

For the top of your bench, or for the track base, there is very little to suggest other than one of the particle boards, e.g. Pyneboard. It is extremely versatile and easy for even the most inexperienced to use. Now I know that these requirements may seem as though it is going to cost you a lot of money just to get something to put the track on, but remember, you can rearrange your track and relay it if need be; you can change your scenery, and not disturb the track; but you cannot do things to your baseboard without disturbing everything else. Also remember that the total cost of the baseboard will be nowhere near the final cost of all the track, scenery and models which will be placed on top of the board.

Having chosen your timber, 3 x 1 is the best size for the framework, you can start on the actual construction. You do not have to go in for fancy carpentry. Butt joints are ample, there is no need for anything more complex. The most important thing about building your framework is to ensure that all the ends are square. I will describe the building of a table, as this is the most suitable arrangement for a first layout, and it is also the simplest to build.

The first thing to do is to cut the main side-frame. That is to the length of the table top. Having cut two of these out, cut out the cross pieces. Remember that these will be two inches shorter than the width of the table. Now you can start to nail it all together. The best way to do this is to mark out where the cross pieces are to go, and start the nails. I would suggest the best size of nail is a 2 inch x 12 gauge for the one inch timber. Once you have started the nails, cover the end of the cross piece with a P.V.A. glue such as Aquadhere, then butt this up to the side frame and drive the nails home. If you want to do a really good job, use a nail punch and drive the nails in so that they are just below the surface. When you have nailed all the cross pieces to one side, go back and nail on the other side in the same manner. When this has been done, you can nail on the table top, turn the lot over and nail on the legs. Make sure that all the same length or you will finish up like the people in the cartoons who have to cut off a piece of each leg until the whole lot is back down on the floor. But, assuming that you have managed to get everything right first try, you now have your table ready for you to start building your layout.

Now I am going to give you a few variations which many model railway people have found to make a more useful baseboard, and one which can be incorporated into a larger one when you decide that you can afford to expand.

The most popular form of base is what is known as the open frame. This is suitable for all types or sizes of layout — the closed table-top is restricted for practical reasons to a size 6 ft. x 4 ft. To build the open top, the side frames are cut out as before, as are the cross pieces. The cross pieces are then placed at intervals of about 18 inches. The tops of the cross pieces should have notches cut in so that you will be able to put in the wiring without it all hanging down under the board. Put the notches about a third of the way along the cross members.

With the open top the outside frame is 3" x 1" timber with the cross pieces made from 2" x 1" and spaced at intervals of approximately 15 inches. The cross pieces should be arranged so that they give the maximum support to the track and scenery.

Legs for any layout should be made from 3" x 1" timber at least, and firmly braced. This can best be done by a diagonal brace being placed from about half-way down the leg.

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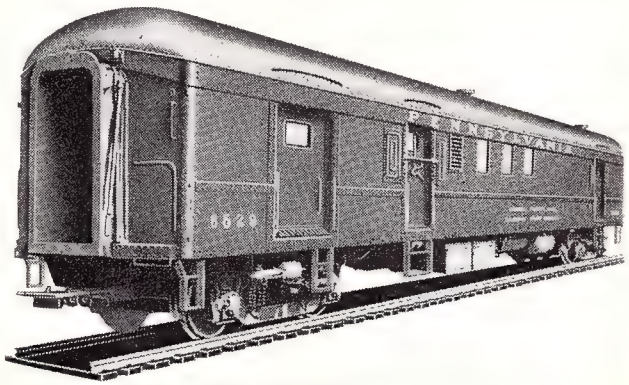
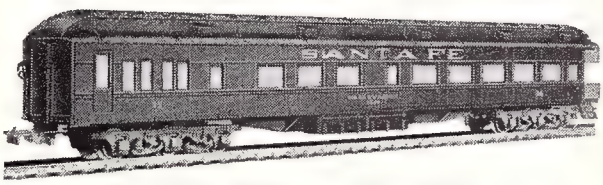
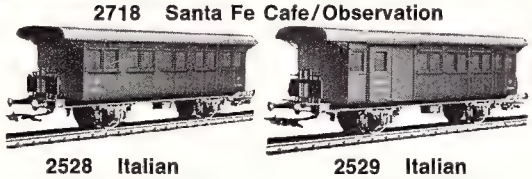


2742 Pennsylvania Post Office Car



2718 Santa Fe Cafe/Observation



2528 Italian 3rd Class Coach

2529 Italian Baggage Car

2764 Northern Pacific Vistadome

2766 Northern Pacific Tail Car

2765 Northern Pacific Roomette

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2764	North. Pacific fitted Vistadome, 12½ in. long	7.50
2765	Northern Pacific fitted Roomette ,12½ in. long	5.95
2766	Northern Pacific fitted Tail Car, 12½ in. long	5.95
J59	Union Pacific 8-wheel bogie coach, 12½ in. long	3.95

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Remember, we still have our plan service. For a full listing of the plans available, see this issue, Page 21. The prices vary as to the scale and size of the plan required.

Back numbers of AMRM are still available. Issues 2 to 17 cost 28 cents and issues 18 on are 33 cents. Some of the early numbers of the AMRM are now in short supply or out of Stock. So please give a second choice when ordering.

When ordering please add 10 cents to cover mailing charges and handling.

S.C.R. PUBLICATIONS
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1021

The N.S.W.G.R.'s smallest steam locomotive, 1021 was constructed by Manning Wardle and Company in 1916 for the Public Works Department, then constructing authority for the State's railway line. It was one of a class of five and was used on the construction of the North Coast Line. It was the only one retained when P.W.D. handed over their construction locomotives to the N.S.W.G.R. in 1917. The locomotive became no. F1212 on the Departmental roster, and in 1924 was renumbered 1021. It was utilised as works shunter at Cardiff for much of its life. The locomotive's present duty is depot shunter at Broadmeadow locomotive depot, where it seems to do little but move itself (however it probably does make itself useful when people who want to see it are not around).

The locomotive, by its very size, must present a challenge to any modeller especially in HO Scale or N Scale.

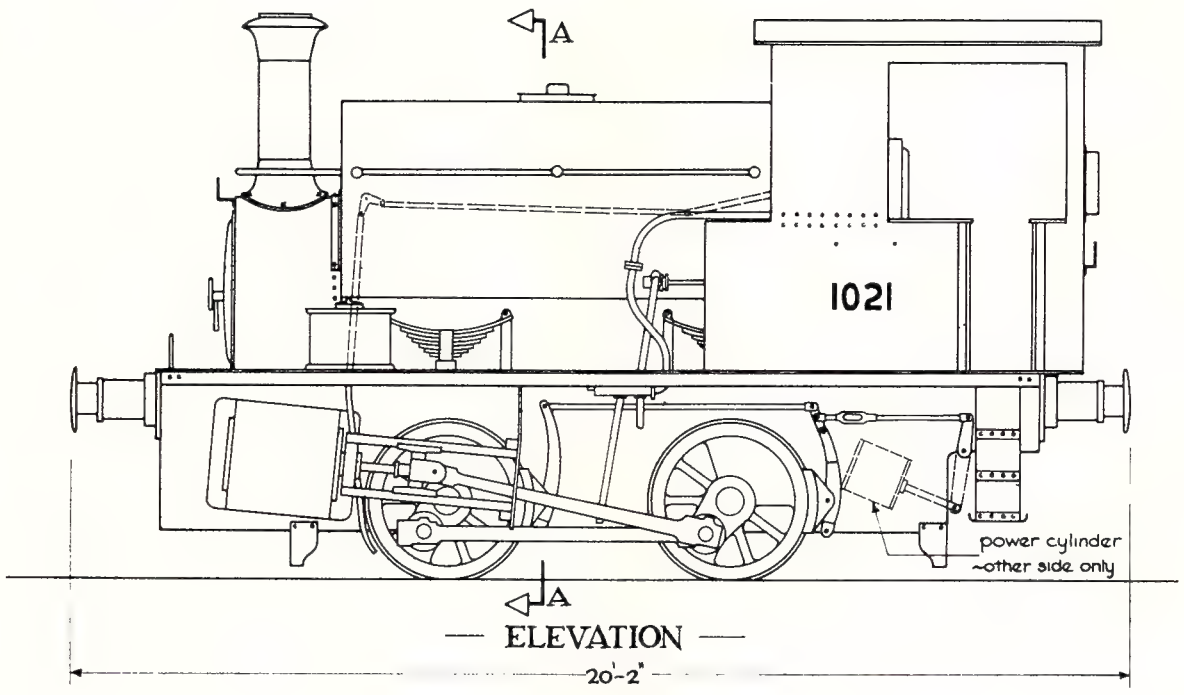
Cylinders .. . 12in x 18in
Driving wheels . . . 3ft (36")
Boiler pressure . . . 160 lbs
Tractive effort . . . 9200lbs
Total weight . . . 21 tons 1 cwt.
Present livery . . . Black (white lettering on Vermillion buffer beam. Yellow lettering on Cab Sides.)

SAR COAL STAGE Cont.

and the pulley wheels at the top. The pulley wheels were made from a number twelve knitting needle, plastic type. Make up the skip from shim brass and fix in the desired position.

Finally, fix the ladder, railing around the chute platform area, electrical conduit and lights. The light shades were made from shim brass, but sequins are a good substitute. The light "globes" were formed using a blob of Selleys Aquadhere which dries clear and also forms the desired pear shape of a light bulb.

The rear loading bin and its associated pit is then built and fixed in position in the hole cut out of the baseboard.



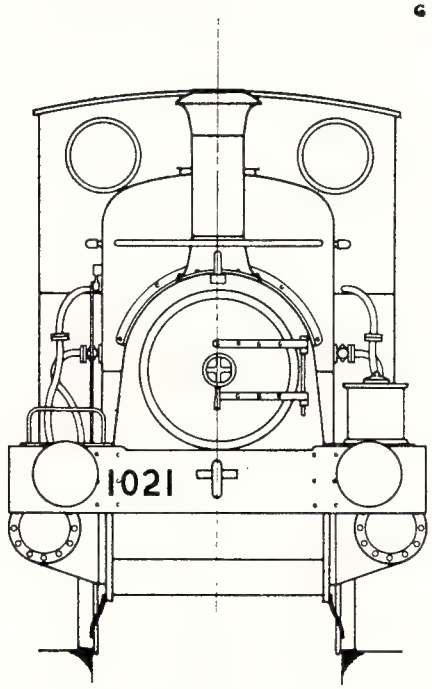
— ELEVATION —

20'-2"

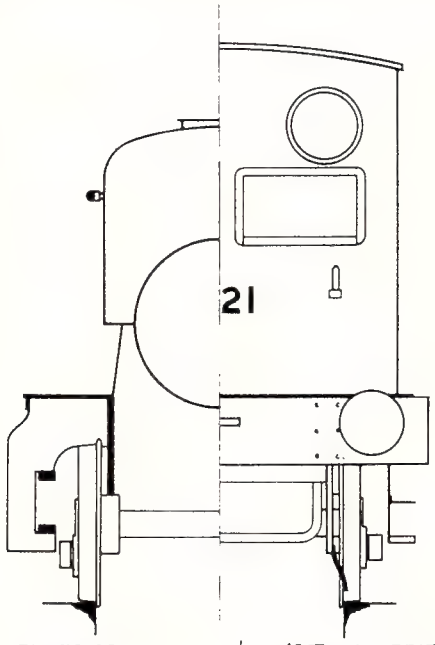
SCALE: 7MM=1FT

12 INS 0 FEET 10

6 5



10'-7"



—FRONT VIEW— —PART SECTION AA & REAR VIEW—

— NSWGR LOCO '1021' —

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EASTERN DIVISION

PROGRAMME FOR 1970 (subject to change)

9th May: John Casey, Taiyul Ave., Narrabeen.

June: Visit and inspection of Central Station (Friday night).

11th July: Visit to Sydney Society of Model Engineers, Ashfield.

8th August: Visit to a home — yours?

19th September: Visit to Sydney Live Steam Locomotive Society, West Ryde.

2nd-5th October: Sydney Model Railway Exhibition.

11th October: Visit to a home — yours?

14th November: Visit to a home — yours?

12th December: Picnic outing, train trip Sydney-Wollongong, Moss Vale-Sydney.

Eastern Division held its March meeting at Rodney Tonkin's home at Oatley on the 14th of the month. Our fearless Vice-President was the only one to sample the wetness of the swimming pool but was seen to make like a flying fish a mere three seconds after his initial plunge.

After inspecting Rodney's fine stud of local locos and rolling stock (and defrosting the Vice-President), the meeting got down to business. The main point of discussion was the October Exhibition and the form which our exhibit will take. Several ideas were offered and after some "discussion" (who did throw John in the pool?), an enjoyable afternoon tea was served by Mrs. Tonkin.

For a distinct change the April meeting was held at the South Pacific Electric Railway at Loftus, south of Sydney. With our beloved leader absent due to illness (a cold; caused by last month's dip in Rodney's pool?), the meeting nevertheless soon got down to business; except for one member who was seen disappearing in a westerly direction in an ex-Brisbane tram. The meeting decided to construct a layout for the October Exhibition. A second point of discussion was a rail trip to be run on either the first or second week-end in December to southern districts of the State. It will be a one-day tour with points of special interest to all modellers. All readers and their families are invited to come. More details later.

AUSTRALIAN MODEL RAILWAY ASSOCIATION, NEW SOUTH WALES BRANCH.
BRANCH REPORT, MARCH/APRIL 1970 ISSUE

At the Annual General Meeting of the N.S.W. Branch, held on 7th February, the following members were elected to the Management Committee for 1970:—

PRESIDENT: Graham Lamour.

VICE-PRESIDENT: Gus Durham.

SECRETARY: Phil Kelly, 20 Lee St., Condell Park, 2200.

TREASURER: John Skilton.

COMMITTEEMEN: Kevin Brown, Ron Cunningham, Brian Day, Les Fordham, Norm Read, Keith Robinson, Paul Tilden, Harold Warren.

In addition, Colin Gilbertson agreed to remain in the position of Branch Reporter. The Branch extends its thanks to Ken Edwards, who did not seek re-election.

Meetings will be held on the first and third Saturdays of the month, as previously, and, for a trial period of six months, an additional meeting will be held on the fourth Friday evening of each month.

Recent activities have included two layout operating afternoons during January, with the Annual Meeting and a working-bee for February. The first of the Friday night meetings, held on 27th February, was a colour slide night, presented by Mr. Farquhar.

Coming meetings will be:—

Friday, 24th April: Slide Night.

Saturday, 2nd May: Modelling Clinic—ask the panel about your modelling problem.

Saturday, 16th May: Working-bee.

Friday, 22nd May: Auction.

Saturday, 6th June: Layout Operation.

Saturday, 20th June: Visit to Sydney Live Steam Locomotive Society, Darvall Park, West Ryde (subject to confirmation).

Friday, 26th June: Layout Maintenance and Operation.

SOUTH AUSTRALIAN RAILWAY MODELLERS' ASSOCIATION
SECRETARY: BOB IRVINE, 50 Gardiner Ave., Warradale

Meetings are held on the second Wednesday of each month in the Railway Institute Hall, at the foot of the steps leading down from the Adelaide Station car park. Meetings start at 7.45 p.m., with a short running session before and afterwards.

The demolition of the layout and room to make way for the proposed Festival Hall construction was expected in April, 1970. We learnt recently that we are now in stage 2 of the project and have a further twelve months before the axe falls. Meanwhile the search for new premises goes on.

Eric Milne's film of the recent Goodby Narrow Gauge tour made its debut at our January meeting. The combination of sight and sound as double Garrats slogged uphill made the film truly memorable. The last of our Summer freight tours rode the rails on Friday, 16th January. The cackle of twin 900's up front and the other track sounds underneath the "Centenary" car was enjoyed by all. Twin 930's brought the train back from Tailem Bend on Saturday morning.

The Auction held at the February meeting once again proved both interesting and profitable for all who attended. Judge for this year's Modelling Competition, Tony Horsman, announced his findings at the March meeting. Remarking on the overall improvement in the standard of those models entered compared with previous years, he had pleasure in giving the Master Modeller Award to Peter Fehlberg's brass 2-8-0, which had been worked considerably to resemble the SAR team loco styling (a definite improvement). Special mentions went to a stone hopper by Des McAuliffe, an SAR water tank by Roger Wheeler (AMR Magagine, in near future) and Bob Burton's styrene Puffing Billy in HON2½. Other models to catch the eye were the SAR narrow gauge rolling stock by Len Redway. The next competition will be in March 1971.

The April meeting will see the election of 11 members to form a Committee. At the next Committee Meeting they will select the office-holders for the coming year. This method for elections saves time at the meeting and will allow a discussion to be held on the pros and cons of the very popular Kadee couplers.

If you're interested in model railways, come along to our monthly meetings and the construction nights

SUNSHINE MODEL RAILWAY CLUB
Representative: R. Hanby, 109 Bloomfield St., Taringa, Queensland.

Meetings are now being held monthly in the usual informal guise. These activities take the form of operating sessions on members' layouts or slide or film evenings.

The club caters for Australian prototypes modelling in fine scale from O to N. Members' layouts presently in operation are to HO, HOn3½/HOn2½ n and N scale. Accent is mainly on QGR and NSWGR styles.

"The Side Rod" is the club's official organ, published quarterly, and contains news and information for modellels based in Brisbane.

Present plans for the club involve a new standard gauge and 3ft. 6in. layout to replace the now eight-year-old HOn3½ Oodnagalbie layout. The new layout is scheduled for completion by this year's Brisbane Model Railway Exhibition. Outings in the past have been mainly on a joint basis with the Brisbane Omnibus Historical Society to places of like interest. A highlight planned for 1970 is a visit to Sydney on the Labour Day week-end, to sample the delights of electric traction (once again) and double-deck Albions.

WARRAGUL & DISTRICT RAILWAY CLUB
P.O. Box 51, Warragul, 3820

Just a run-down on our club. It is five years old and consists of 10 seniors and two junior members, whose main interest is "OO" gauge, with a predominance of Tri-ang. The club owns a 'OO' layout which is 8ft. 6in. square with 60ft. of Peco track and electrically-operated points, and is wired to the split potential plan through 36 telephone type keys. We occupy a rented room in Central Arcade in the centre of Warragul and meet on the first Wednesday of each month at 8 p.m.

YAGOONA MODEL RAILWAY CLUB

The club held its Annual General Meeting on Monday, 2nd March, 1970, at the home of Neil Mathison. The meeting was chaired by Mr. Jack Shurmer. The following officers were elected:—

PRESIDENT: Mr. Don Marks, phone 709-2337.
SECRETARY: Mr. Bert Toomey, phone 644-3561.
PUBLICITY OFFICER: Mr. David Lye, phone 70-4915.

Incoming President Mr. Don Marks paid tribute to last year's officers, Messrs. Neil Mathison and Bert Toomey, for their efforts during 1969.

We have welcomed two new probationary members in Mr. Les Hardacre and Mr. Kevin Daniel, who should prove valuable assets to our organisation.

Our first exhibition for the 1970 calendar year was held at Auburn Presbyterian Hall, where a Hobbies Display was presented. This turnout proved to be very successful.

We have all eaten plenty of Kelloggs products at some time or other and saved the items in each packet and made them up into static models. But Mr. Don Marks has taken this one step further, and we now have a display piece which was the talk of the exhibition, "Kelloggs Crazy Camel Train". Believe it or not, the train actually runs.

Thanks to a big effort from Eddie and Les Toomey, who constructed their new exhibition layout in three week-ends, we were able to see Eddie's "Big Boy" in operation. With old hands Warren Shurmer, John Meehan and Johnny Coombes, and due to the courtesy of Berg's Hobbies, Parramatta, and Limarail Australia, who supplied various models, we were able to display a variety of exhibition pieces. We must thank Secretary Bert for sacrificing his early nights to finish his Marklin layout and other various exhibition items.

Our next exhibition will be at the Boy Scout Hall, Ingleburn, on 4th July, and if you haven't looked over our display we invite you, one and all, to attend. Any club interesed will be given a guided tour.

Any person wishing to contact the club may telephone the above office-bearers on the number listed.

SHUNTER'S STEP

N.S.W.:

Modellers in the Liverpool-Glenfield-Campbelltown area who would like to form a Club in this area should contact J. Hogg, 282 Railway Parade, Macquarie Fields. 2564. Phone 605 1753, or write.

George Giraldi, 34 Passefield Street, Liverpool is especially interested in radio control of model railways.

Graham Hodges, 95 Kent Road, North Ryde, 2113, interested in 1900 vintage North American models.

VICTORIA:

Bob Mitchinson, 38 Carronvale Road, Mooroolbark. 3138.

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"CW" Cattle Wagon, 4-wheeled	□
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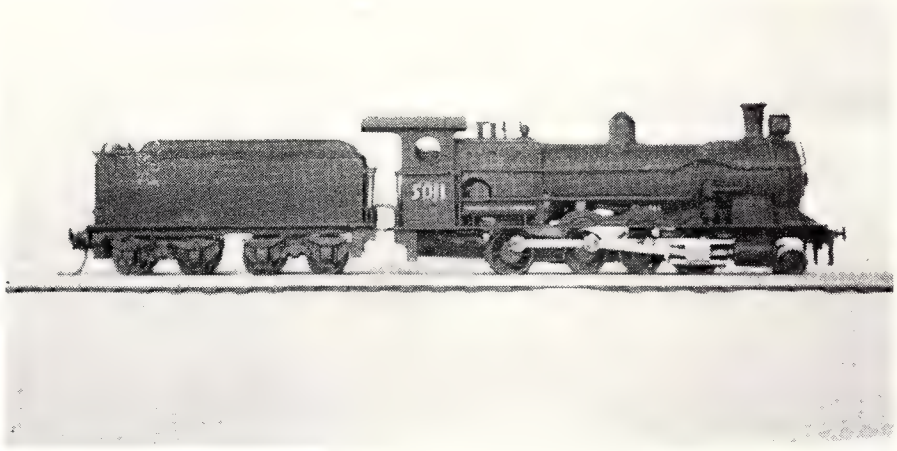
"HG" Brake Van, 4-wheeled	□
"EHO" Passenger Guard's Van	□
"LBB", "LFA" Passenger Car	◆
"CPH" Rail Motor	□
30 Class 4-6-4 Tank Loco	◆
36 Class 4-6-0 Loco	□
19 Class 0-6-0 Loco	◆
38 Class 4-6-2 Loco	◆
57 Class 4-8-2 Loco	□
45 Class 1800-h.p. Diesel Loco	●
46 Class 3600-h.p. Electric Loco	□
1021 0-4-0 Box Tank	+
VR	
"Z" Brake Van, 4-wheeled	□
"QR" Gondola	★
"AV/BV" Passenger Car	★
"Na" Class 2-6-2 Tank Loco, 2ft. 6in. gauge	★
QR	
"CMIS" Refrigerator Car	★
"H" Open Wagon	★
"PJM" Drop Centre Wagon	★
"WHO" 45ft. Gondola	★
"ABC" Rail Motor	□
SAR	
"Rx" Class 4-6-0 Loco	□
"FB" Flat Car	★
"On" Ore Wagon, 3ft. 6in. gauge	★
Goods Van Composite	□
Coal Stage	★
TCR	
4-wheeled Truck and Van	★
"W" Class Diesel Hydraulic Loco	★
WAGR	
"WGX" Open Wagon	□
"WVX" Covered Van	□
"WVB" Covered Van, 4-wheeled	□
"L" Class 3000-h.p. Diesel Loco	□
60-ton Bauxite Ore Hopper, 3ft. 6in. gauge	★
"RCB" Gondola, 3ft. 6in. gauge	★
EMU BAY	
4-8-0 Loco	★
NZR	
"Vs" Insulated Meat Wagon	★
"KP" Covered Goods Van	★
"Ab" 4-6-2 Loco	★

THE MIXED TRAIN

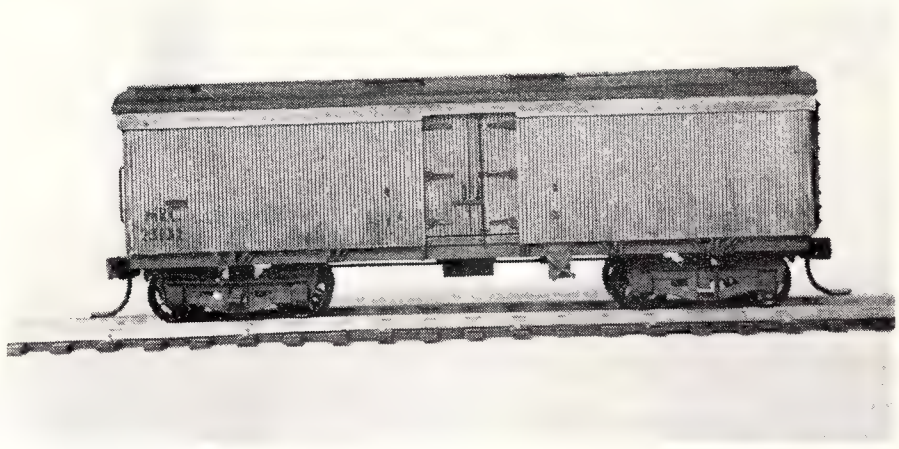
Since the advent of railways many, many small branches have had to rely on a mixed train to take their products to market and to bring needed items from the cities.

These trains usually consisted of a steam loco, several assorted goods wagons and a passenger car or two, and rounded off with a guard's van.

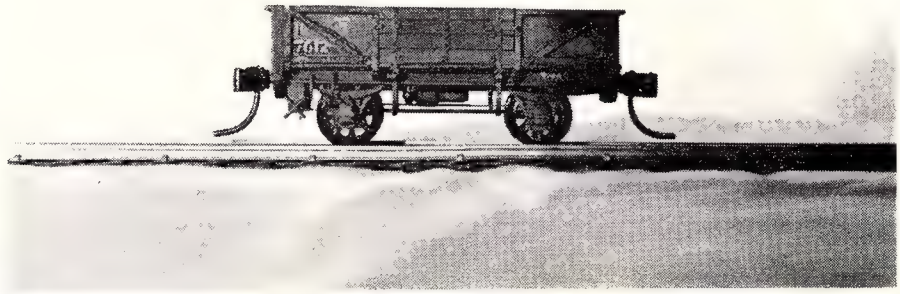
These photographs of John Huxtable's scratch-built models were sent to the magazine before he left for Sweden. All the models are of N.S.W.G.R. prototype and are made to TT scale.



D50 Class Locomotive. Built of brass, with Pitman motor, H.P. driving wheels and Kadee couplers.



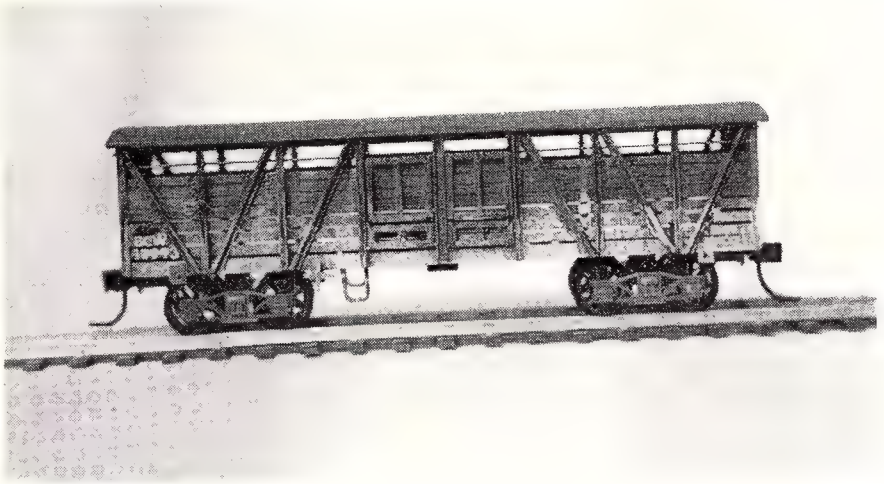
MRC Van. Built of north-eastern wood, scratch-built bogie sides, Peco wheels and Kadee couplers.

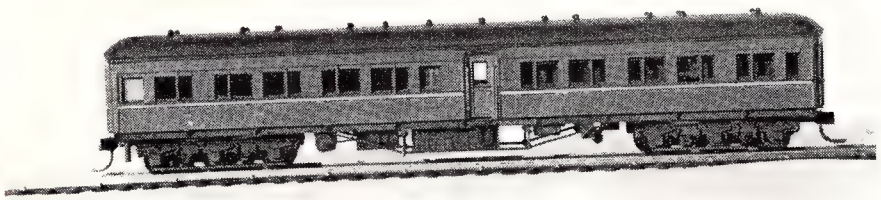


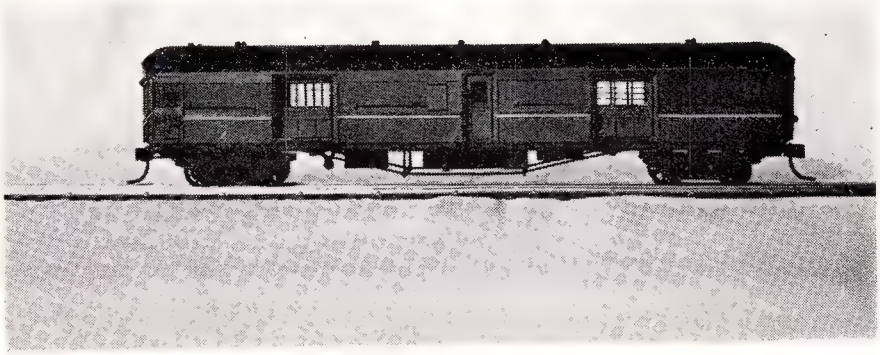
S Waggon. Cast in Plastibond in rubber moulds, with K's axle-boxes, Peco wheels and Kadee couplers.

The train would jog along at about 20 m.p.h., shunting at every siding and generally taking a long time to get nowhere.

These trains are now becoming a thing of the past, replaced by high speed goods trains and rail cars. Some people have captured this vanishing scene on film, while others like John Huxtable, have captured it in the more tangible form of models.







BCW Waggon. Built of north-eastern wood, K's bogie sides, Peco wheels and Kadee couplers.

TAM Sleeping Car. Built of north-eastern wood with ends, doors, underframe details and bogie sides all cast in rubber moulds.

MHO Guard's Van. Similar construction to the TAM.

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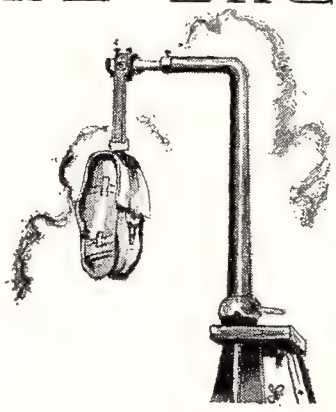

Sir,

After a very interesting Sydney Town Hall Exhibition, my conviction is stronger than ever; why can't "trams" get their sticky pantographs out of the Model Railway industry?

As far as I can analyse it, the tram modellers must either be in a terrifically vast minority or they simply have not enough enthusiasm to get on their own four wheels. I class the tram modellers as either vegetables or leeches: they sap the space off the "Our Plan" page, they cling to pages which should be devoted entirely to (A M.) RAILWAYS (M.).

As for the trams themselves, I think that they are outdated, very dangerous, and one of the problems in major traffic problems in cities which still persist in keeping these inefficient, iron monsters which are ready to trample any pedestrian in the way. But it is not the trams, but their modellers who infuriate me.

The model trams at the exhibition in the Town Hall were too large, too noisy and those curves! There were sparks at every joint in the overhead wiring (which was rather untidily fixed anyway) and not a great length of track is possible if the houses are going to be so big. Of course, the houses were to scale, but so few could be placed in the area, whereas the 'O' gauge railway layout (Exhibit No. 14) proved that all that was needed was something to support the tracks and a few stations to make the layout quite popular.

If I have been criticising unjustly, I would like to see some response from the tramway enthusiasts in defence of their precious (?) trams.

P. J. HART
Pennant Hills 2120

This letter does not reflect the views of the editor or the committee of this magazine or of S.C.M.R.A. This magazine will print any item which we think may be of interest to modellers. We here know several railway modellers who have included trams in their layouts. It was for these modellers that the items which seem to offend Mr. Hart were published.

Sir,

I like your invitation to write you with thoughts on the matter raised in A. C. Robinson's letter in Mail Bag Nov./Dec. 1969.

I like Mr. Robinson's letter and in fact it crystallises for me thoughts which have been floating about in my mind for some time.

First let me dispose of the question of my qualifications to write on this matter — technically I have next to none beyond being active in the then newly formed Victorian Model Railway Society over thirty years ago and dabbling in 'O' gauge at that time; today I qualify as one of Australia's most incompetent armchair model railway planners.

However this does not preclude my active interest in railway matters in the fields of all scales and gauges — and not by any means least those pertaining to furthering the excellence and enjoyment of models and modellers. Undoubtedly, this is best done by and through the collective voice and activities which an association (such as each of the two to which I belong) provides for its member individuals and clubs and societies.

I know nothing of any differences which may exist between the present two bodies but I do know that there is ample room, and indeed urgent need, for expansion of the field now being covered and improvement of the efficiency with which it is done. The present level of that efficiency is high and I will venture to say it could not be raised by either Association acting alone.

Let us take a lesson from the now rapidly growing results of Railway Standardisation in Australia and remember that ours is a big country with a small population — and no prospect of changing either factor.

Time, tide (and flanged wheels rolling on steel rails) wait for no man and this proposal means that some (many so) in both Associations would have to drop many projects dear to the heart and so apparently slow down that note of progress which has been achieved by the sweat and tears — if not the blood — of the dedicated men who labour long and earnestly.

But let us be realists — we do not need the competitive urge of the "other mob" to spur us on to tackling the problems and coming up with solutions, rather must we ensure that the problems are tackled by the best teams available in the whole country, one to each and so many concurrently. In this way we can be assured that whatever work is in train will be picked up and carried on with reinforced vigour, nothing worthwhile will be lost and a great deal of new ground will be broken, tried and brought to fruition.

One other thought — if my plea impresses you, possibly your thought will be "here's a man with a lot to say; let's toss him the job of doing something about it." That is often a very profitable line — in my case I must reluctantly confess to being "too old", and I am heavily committed in Australian Railway Historical Society Affairs as well. Seriously, it is a job for a vigorous young team—correctly two teams, one from each Association. But I do urge action — and NOW.

J. C. BROUGH
Member, S.C.M.R.A. and A.M.R.A.
Balwyn 3103

Do you have any thoughts on which you might like to expound? Then this page is for you.

Sir,

It's wonderful that we now have so many Australian kits on the market. I enjoy seeing the real thing on the line and then model a string of them.

I recently found an excellent dodge for weathering a string of metal 'S' trucks and also getting out of a difficulty such as not having any matt finish paint. Here's what I did: after assembling the kits according to instructions and leaving them overnight, I degreased them with petrol used with a toothbrush and painted them with glass black (no matt on hand). Whilst they were still wet I blew ordinary talcum (baby powder) over them. It gave them a beaut matt finish and settled on the horizontal and oblique structural members and picked out all the detail inside as well as outside.

C. SZABO
Mosman, N.S.W.

Sir,

This letter poses a couple of questions which I hope either you or your readers will be able to answer for me. They are questions which I am sure will be of interest to other readers of this magazine.

What do the initials N.K.P. mean in relation to the Nickel Plate Road, or more correctly the New York, Chicago and St. Louis Railroad Company?

Also for some time there has been reference to the Victorian Railways' H Class H220 as being the "biggest, weightiest and most powerful loco built in Australia". Now I'm not trying to start a 'barney', but according to the Jan./Feb. '68 issues of AMRM, H220 had, amongst other things, a tractive effort of 55,000 lbs where the Aug./Sept. '65 issue give the tractive effort of the NSWGR's D57-58 Class as 56,000 lbs. I don't wish to stir up interstate rivalries, etc., but someone may just have an answer.

Do you happen to know what the official colours were — preferably in British terminolgy — of the NSW C38 Class locos when they were in their green livery?

I can't close without saying how good the AMRM is. It is improving with each issue.

WILLIAM CLOW
Darwin, N.T. 5790

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GOING UNDERGROUND

By Gerald Lyde

Tunnels can do many things for, or to, a model railway layout. Once an "elephant-sized" rat ran out of one of mine.

I still remember that midnight in 1952. I had brought a fellow newspaper reporter home with me for the weekend, and he wanted me to take him immediately into my basement and show him my railway layout. These were the years when Hornby O gauge was the favourite, and my guest adjusted him eyes to 7mm scale. I had overlooked the fact that because we lived in the scrub near a sawmill, we had many bush rats in the area. One of them had made himself a nest in one of the tunnels. When a Hornby locomotive scared him out, he was, in our eyes, elephant-sized. The weekend started excitingly.

But interesting facts about model tunnels do not end there. Such a tunnel can be easy to build, and often is overlooked. Visitors may ask 'Why hide trains in tunnels?"

When trains enter a tunnel they can enter another world, an imaginary world that seems to enlarge the visible part of your layout.

One way to make a deceptive tunnel is to make it on a curve, that only a few car lengths of a train are visible. This kind of tunnel really is a kind of gate in your modelled mountain. The back side of the mountain is hidden from spectators in front of the layout. Back there the train is really in the open, can be worked on there, or can be held there for a long time before it is seen again. It has been on a long trip, your visitors imagine.

One of my favorite tunnels had a passing siding inside it. Both ends of the tunnel were visible, and it seemed to be a one-track tunnel. Two trains could be run toward each other through the tunnel and would come out again without colliding. The visitors would gasp in horror, expecting a head-on crash, and nothing happened.

How to make a tunnel? Sometimes you just make the portal, a few car lengths of timbered siding, set them over the track—a curving track—and build the mountain over portal and siding.

If the tunnel is to be a real tunnel, visible from both ends by visitors who can walk around the mountain, a different structure is needed. A concrete-lined tunnel is good in such a situation. You lay the tunnel-length track, then shape in your garden a tunnel-size "interior" of mud, pour plaster or concrete over it, let it harden, wash the mud out, and lay the liner over your track. You later put a mountain above the tunnel and around it, paint the mountain and "plant" trees in it, glue grass onto it and you add fancy concrete portals. You'll have a tunnel!

One of my most tricky tunnels had one track of two gauges running through it. That's right. One track to two gauges—but it started out to be just one O gauge track. It was built as a concrete tunnel, through a concrete mountain, and I later decided to put in a third rail S gauge trains could also pass through the tunnel.

This was a long tunnel. Like all O gauge tunnels it was large enough to put my hands inside it, but not large enough to hold tools in my hands there.

The solution was simple. I used a long length of rail—two pieces soldered end-to-end to be as long as the tunnel —pushed it into place, adjusted it to gauge with pins of gauge length, then poured glue around it. No spikes were needed. No tools were needed. When the glue hardened the pins were removed and the third rail was there to stay.

Perhaps the most unusual use a tunnel can be put to is to hide a spiral loop as a train enters at one level and emerges at a higher/lower level almost at the same spot. As my dual gauge electric railway grew I decided to add overhead power to the system. The overhead in the tunnel is single strand; like tram wire. The O gauge trains were powered by an electric motor and locos via the pantograph while the S gauge trains were powered in the conventional manner through the wheels.

Another very tricky tunnel is now under construction for the layout; this is to be a very short one. Visitors will be able to see through it, and in the background will be a painting of a distant scene. In this case the train will not enter a world that is just imagined. It will be a different world, a painted world.

ERRATA

Sir,

Unfortunately certain inaccuracies crept into the series of excerpts from my manuscript published in the Jan./ Feb. issue. The following is a tabulation of equipment in the V.R. T class (types G8B and G18B).

Locomotives	Power Unit	Generator	Motors	Notes
T320-346 & T413	EMD 567CR	D15	D19	Low cab
T347-356	EMD 567CR	D15	D29	Raised cab
T357-366	EMD 567CR	D25	D29	Raised cab
T367-398	EMD 567CR	D25	D29	Low short hood
T399-412 & H1-5	EMD 567CR	D25	D29	Low short hood
	EMD 645E			

T 413, the second locomotive to carry that number, was formerly Australian Portland Cement locomotive D1. It is now 5 ft. 3 ins. gauge, but retains the dynamic braking equipment, being the only T class so fitted.

Only two T class are used on standard gauge; these are at present from the group 367-398. Originally numbers 357-358 were in use on the standard gauge, but no low-cab locomotive has been so used.

H1-5 have standard motors and gearing, but special slow-speed control equipment enables them to perform hump shunting duties.

The excerpt on the DL 541 stated 'No buffers or staff exchangers are fitted as these items are not used on the S.A.R.' This should have read 'not used on the S A.R. standard gauge Peterborough Division'. The 600 class have a basic colour of maroon, not 'Post Office Red'.

When the J26C excerpt was written, it was anticipated that the 422 class would be transferred to the Western Division of the N.S.W.R. This has not eventuated.

PETER J. CLARK

Turramurra, N.S.W.

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MAY 20

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Readers are requested to note the new address for SCR Publications. It is:

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KINGS CROSS, N.S.W. 2011

Please use this address for all correspondence.

LimaRail

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- H.O. or mini N. gauge. Power or battery driven.

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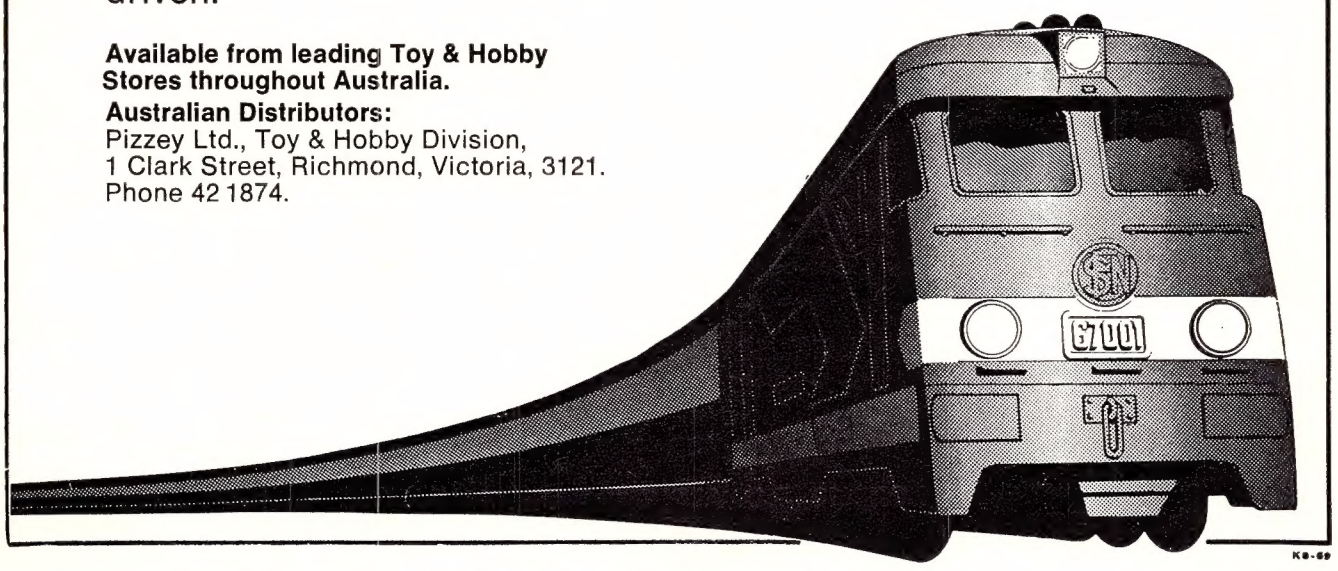
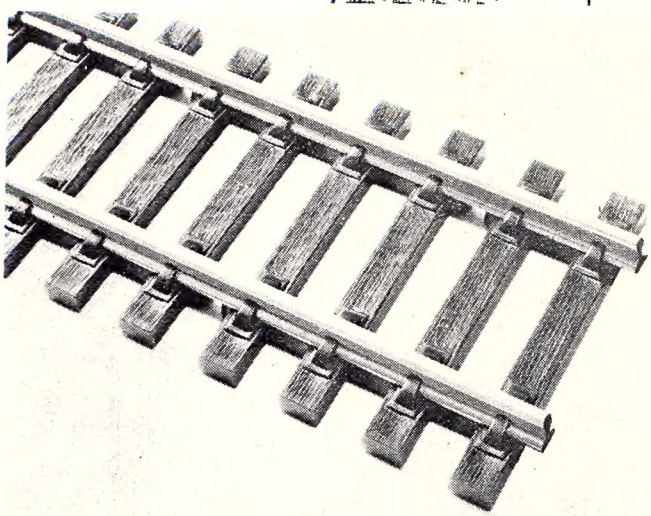


K8-69

Change to PECO STREAMLINE TRACK

in HO/00, N, O & 00-9 Gauges

If you haven't already !



The best known of all Flexible Tracks is PECO, for wherever Model Railways run — there is PECO! The Flexible Track is supported by a wide range of accessories, which you may see at a great many hobby, sports and toy shops in Australia. Whether your choice be HO/OO or N or 9mm Narrow Gauge or O Gauge, you have the family likeness in track with its Australian sleeper spacing.

HO/OO

TRACK

SL-100 Streamline Track with Nickel Silver Rail, 1 yd.	$1.25
SL-100B Streamline Track with Brass Rail, 1 yd.	$1.00
SL102X Streamline Track with N.S. Rail and with Concrete Sleepers, 1 yd.	$1.25

POINTS

SL-88X Right Hand Point, 5ft. radius, each	$2.95
SL-89X Left Hand Point, 5ft. radius, each	$2.95
SL91X Right Hand Point, 2ft. radius, each	$2.35
SL-92X Left Hand Point, 2ft. radius, each	$2.35
SL-93X Short Crossing (24°), each	$2.35
SL-94X Long Crossing (12°), each	$2.95
SL-97X Y Point, each	$2.35

TRACK FIXINGS

SL-10X Metal Rail Joiners, pkt. of 24	40
SL-11 Insulating Rail Joiners, pkt. of 12	35
SL-14 Track Fixing Pins, ¼ oz.	40
SL-17 Stud Contact Strip for Track, 6ft.	45
SL-18 Stud Contact Strip for Points, 4ft.	45
SL-30 Uncouplers A/HD type, each	55
SL-32 Ballast Slopes—Cork, two	50
SL-37 Track Cleaning Block, each	40
SL-40 Buffer Stop Kit—rail built, each	35
SL-41 Buffer Stop Kit—sleeper built, ea.	40

FOAM BALLAST UNDERLAY

SL-50—for Track, Roll of 16½ ft.	$1.35
SL-51—for R/Hand Points SL-91X, two	60
SL-52—for L/Hand Points SL-92X, two	60
SL-53—for Y Points SL-97X, two	60
SL-54—for Short Crossings SL-93X, two	60
SL-55—for R/Hand Points SL-88X, two	60
SL-56—for L/Hand Points SL-89X, two	60
SL-57—for Long Crossings SL-94X, two	60

POINT OPERATIONS

SL-70 Point Motors, each	$1.25
SL-71 Adaptor Bases for point motors, ea.	30
SL-72 Actuator Switches, each	40

N GAUGE

TRACK & ALLIED ITEMS

SL-300X Streamline Track, Nickel Silver Rail, Plastic wood-grained sleepers, plastic lugs hold rail firmly in place, fully flexible, 1 yd.	$1.00
SL-310X Metal Rail Joiners, give a firm fit and good electrical bond, pkt. of 24	40
SL-311 Insulating Rail Joiners, for use where an electrical "gap" is required, pkt. of 12	35
SL-330 Decouplers, brown plastic, pair	55
SL-340 Rail Built Buffer Stop Kit (Clip to track), two	35

FOAM BALLAST UNDERLAY

SL-350—for track, 16½ ft. Roll	$1.35
SL-351—for R/Hand Point 391X, two	60
SL-352—for L/Hand Point 392X, two	60
SL-353—for Y Point, two	60
SL-368—for R/Hand Point 388X, two	60
SL-369—for L/Hand Point 389X, two	60
SL-370—for Long Crossing, two	60

POINTWORK

SL-388X Right Hand Point, 3ft. radius, ea.	$2.75
SL-389X Left Hand Point, 3ft. radius, ea.	$2.75
SL-391X Right Hand Point, Medium radius, each	$2.35
SL-392X Left Hand Point, Medium radius, each	$2.35
SL-394X Long Crossing, each	$2.85
SL-397X Y Point, each	$2.75

See your dealer first. Only if you can't find one, contact us:

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